

**CURRICULUM RELATED BARRIERS TO TEACHING AND LEARNING AT
FURTHER EDUCATION AND TRAINING COLLEGES IN THE EASTERN CAPE
PROVINCE OF SOUTH AFRICA**

by

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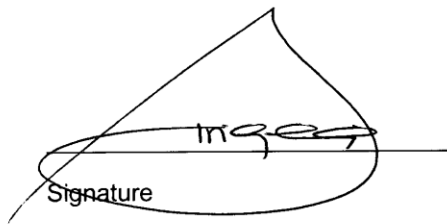
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DECLARATION

I declare that, CURRICULUM RELATED BARRIERS TO TEACHING AND LEARNING AT FURTHER EDUCATION AND TRAINING COLLEGES IN THE EASTERN CAPE PROVINCE OF SOUTH AFRICA, is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.



Signature

(N.R.LINGELA)

14/02/2017

Date

DEDICATION

This work is dedicated to late grandfather who instilled independence and hardwork in me. "May your soul rest in peace Dlamini, Sjadu, Fakade".

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- Dr M.M. Malale for all your patience and guidance. Always ready with advice and encouragement.
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- To my colleague Mr K. Matshaya who encouraged me along the path. Do not tire as the journey has just begun.
- Lastly. Most importantly, to my Jesus my personal saviour for giving me the strength, wisdom and courage to continue and making the journey easier.

ABSTRACT

South Africa is in dire need of qualified technical personnel for its economic growth. Technical and Vocational Education and Training Colleges are in the best position to supply the needed qualified technical personnel. But, there are challenges which need to be solved if this situation of the need of technically qualified personnel is to be met. These challenges include amongst others, lack of resources such as human resources, physical resources, funds and lack of experiential training for lecturers and students in industries. This qualitative study was conducted in one of the Technical and Vocational Education and Training Colleges in the Eastern Cape Province. The aim of this study was to find out which curriculum related barriers hinder teaching and learning in the Technical and Vocational Education and Training Colleges. The sample of the study consisted of lecturers in the Engineering Campus who had different qualifications and number of years in the institution. Data were collected using interviews and document analysis. The study revealed different curriculum related barriers and several strategies that can be used to counter the impacts of the barriers. The study also highlighted the need for the Department of Higher Education and Training to help develop lecturers and assist in partnering with private sector for work-integrated learning.

Key words: Curriculum, curriculum related barriers, Technical and Vocational Education and Training Colleges, work-integrated learning, pedagogical barriers, and professional development.

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LIST OF ABBREVIATIONS

TVET – Technical and Vocational Education and Training College

NATED – National Accredited Technical Diploma

HRDSA – Human Resource Development Council of South Africa

NC (V) – National Certificate Vocational

DHET – Department of Higher Education and Training

NSFAS – National Student Financial Aid Scheme

NQF – National Qualifications Framework

SAQA – South African Qualifications Act

SETA – Sector Education and Training Authority

OBE – Outcomes-Based Education

ETDP SETA – Education, Training and Development Practices Sector Education and Training Authority

FTE – Full-time Equivalent

ISAT – Integrated Summative Assessment Task

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CHAPTER ONE

1. CONTEXTUALISATION OF STUDY

1.1 INTRODUCTION AND BACKGROUND

The research reported in this study focused on curriculum related barriers to teaching and learning at Further Education and Training (FET) Colleges. The concept FET College is used interchangeable with Technical and Vocational Education and Training Colleges (TVET).

Since the dawn of democracy in 1994, education system in South Africa has been undergoing transformation. In the Vocational Education (VE) sector the enactment of the Further Education and Training (FET) Act 98 of 1998 heralded the transformation of the sector. In terms of this Act the technical colleges (trade colleges/ambagskole), as these colleges were previously known, were merged and transformed into FET colleges. The colleges were restructured and programmes were transformed in order to respond to the skills demand of the South African economy. The transformation of programmes included the introduction of National Certificate Vocational NC (V) programmes (Department of Education (DoE), 2008: 3). The NC(V) programmes consisted of 11 programmes which are Civil Engineering and Building Construction; Electrical Infrastructure Construction; Engineering and Related design; Finance, Economics and Accounting; Hospitality; Information Technology; Management, Marketing; Office Administration; Primary agriculture and Tourism (DoE, 2007: 14).

South Africa currently has 50 Further Education and Training Colleges (FETC) which were previously known as Technical Colleges, eight of these are based in the Eastern Cape where this study took place. These colleges were merged in the period of 2002 in terms of FET Act 98 of 1998 (Department of Education (DoE), 2007: 4). The purpose of merging them was to combine smaller and weaker colleges with stronger institutions which would develop the economies of scale and create capacity within colleges to reach more students and offer a wider variety of programmes.

Recently, Department of Higher Education and Training (DHET) (2013: 12) renamed these FET Colleges as TVET Colleges which reflects and defines their nature.

The nature of these TVET Colleges is to train students in different vocational skills in order to be responsive to the needs of the industry.

South Africa as in other countries such as South Asia and Canada, the TVET Colleges faced major challenges in the inception of TVET Colleges. In South Asia these challenges include high educational entry requirement, high opportunity cost for the poor, low female participation, limited vertical mobility and geographical disparity. Also, the programmes of the TVET Colleges are generally seen as of low quality and relevancy as reflected by the high inefficiencies both internal which means low completion and pass rate and extend which means low job placement (Panther, 2014: 167). Panther further indicates that lack of qualified lecturers and functional quality assurance system, inadequate structural materials, equipment and facilities also compound the problems found in TVET Colleges. In Canada some community members viewed the TVET Colleges as second class system created to train people who were not bright enough to make it into university and who worked with their hands in menial jobs (Brennan, 2014: 183). In South Africa, the TVET College especially in the NC(V) programmes cater for learners who had completed grade 9 as an alternative pathways to intermediate occupations Department of Higher Education and Training DHET, 2012:22).

The researcher has observed in the college that the community members view TVET Colleges as the institution that offers skills to the learners that have challenges in school as well as that their learners would not write final examinations. Parents have the mentality that their children would go to the TVET College to do practical work and get a certificate that can enable a learner to get work.

In South Africa the TVET College sector experienced problems some of which were inherited from the previous regime. The challenges included amongst others, teaching and learning meaning low through put rate, inadequate lecturer qualifications and industry linked experience and limited Programme Qualification Mix with insufficient programmes relevant to local communities and industry. Also TVET College examinations and assessment system continue to be a challenge (DHET, 2012: 1).

In order to address some of the challenges the Department of Education enacted the Further Education and Training Act 16 Of 2006. In terms of the Act, the sector was rebranded and transferred from Department of Basic Education to the Department of Higher Education and Training (DHET).

In the TVET College sector, the introduction of National Certificate Vocational (NC (V) syllabus proved to be more academically challenging than the National accredited Technical Diploma (NATED) programme and resulted in high subject failure (Branson, Hofmeyer, Papier & Needham, 2015: 46a-46b). The throughput rate in 2007 stood at 4% in the NC (V) programme (DHET, 2012, 22). The major problem for lecturers is that they teach two different groups of students those who have done grade 12 and those who left school as early as grade 9 at the same time.

Regarding the certification rate, the Minister of Higher Education and Training, Blade Nzimande, stated that although the certification rate was improving, it was not satisfactory (Nkosi, 2014: 1). The 2012 certification report (Report 191) shows 39% NC (V) and 61% certification rates for Report 191 or NATED courses (Human Resource Development Council of South Africa (HRDCSA), 2014: 11). Another certification report shows 9% in 2009 and 33% in 2013 for NC (V), while Report 191 (NATED courses) Business Studies stood at 38% in 2009 and 60% in 2013 (Nkosi, 2014: 1). In 2013, the National throughput rate for NC (V) Level 2 was 33%, Level 3, 30% and Level 4, 37% which is still very low throughput rate (DHET, 2013: 34). In the light of the foregoing that this study explores the curriculum related barriers at Technical and Vocation Training and Education Colleges in the Eastern Cape.

1.2 PROBLEM STATEMENT

As revealed in the background of the study, high failure rate in the NC (V) programmes persisted beside some strides by the Department to improve the situation. Also, it has been observed by the researcher that in the past four years, the management of our college has been grappling with the problem of poor performance in the NC (V) examinations by the students. The researcher views the poor performance as having ramifications. From the financial point of view, the government spent more on entry of students, while the output is poor.

This is also the contention of the Statistician-General of South Africa Pali Lekgotla quoted by Makhubu (2016: 1) in relation to the fees must fall campaign when he said that “These students were tread-milling at the same point and not coming out at the other end” referring to students in higher education.

The researcher views the low output as having implications on the job market. While there is a high need of skilled people and employability rate of skilled people standing at about 90% (Pali Lekgotla cited by Makhubu, 2016: 1), the colleges are in a way failing to realise what they have been established for, that is, responding to the skills demand of the South African economy by producing adequate skilled workers. The poor performance is perceived by the college management as being caused by curriculum related barriers.

Consequently, the researcher decided to embark on an empirical study to identify the curriculum related barriers, their impact on teaching and learning and possible measures to address these challenges.

It has been observed by the researcher that in the past four years, the management has been grappling with the problem of poor performance in the examinations by the students. The poor performance is perceived by management as being caused by curriculum related barriers. From the perceived curriculum related barriers, the problem statement therefore, is to find out what curriculum related barriers affect performance of students and lecturers. Consequently, the researcher decided to embark on an empirical study to explore the curriculum related barriers in teaching and learning at the college.

1.3 MOTIVATION TO EMBARK ON THE STUDY

While studies revealed that the problem of output rate at TVET Colleges persists, the researcher as an employee at the college observed that performance at the college she is employed at it also not satisfactory. As said before, the college management is also concerned about this state of affairs and it is assumed that curriculum related barriers contribute to the poor performance. This state of affairs impacts on the operation of the college in various ways. While the number of students entering the college increases, the number of students exiting the institution decreases.

This affects the next admission of students as the senior students do not give space to the new students and also leads to some students leaving the colleges without completing their studies.

Most of the students are financially assisted by National Student Financial Aid Scheme (NSFAS), which implies that the principle of value for money is in reality not realised. NSFAS is one of the three main sources of funding for the post-school system. The first source being the money transferred to institutions directly from the fiscus. The second source is provided through the levy-grant system. The third is NSFAS which is for helping with the student fees (DHET, 2012: 19). NSFAS therefore, is a bursary scheme which is pro-poor and accords access to those who cannot afford to pay fees. Above all, the low regard of some stakeholders such as business and industry about these colleges is strengthened. As the sector is relatively new, there is a dearth of research in this sector in general and in particular on curriculum barriers as contributing factors to poor performance of the NC (V) students. As the perceived curriculum related barriers were not isolated during the college academic board meetings, the researcher was prompted to find out which curriculum related barriers have an effect on the performance of the students and lecturers in order to come up with measures to address the problem.

1.4 SIGNIFICANCE OF THE STUDY

In South Africa, the TVET College sector has become a priority in the area of higher education. The sector is under continuous transformation and any information which contributes to its development would be appreciated. It is therefore envisaged that the study will contribute to the new knowledge base of available literature on curriculum related barriers and close the existing gaps in research as the sector is new. Given the findings and possible measures to address identified barriers, these will benefit the Department of Higher Education and Training in general, and in particular they will be helpful to policy makers, curriculum developers and the colleges themselves. With the better understanding of curriculum related barriers by lecturers, it is hoped that the subject matter will be properly presented for the benefit of the students. Besides improving the performance of students, it is anticipated that this study will enhance the positive views of the colleges by stakeholders.

1.5 Main-question

What are curriculum related barriers to teaching and learning at TVET Colleges in the Eastern Cape Province?

Sub-questions:

How can curriculum delivery be a barrier to teaching and learning at TVET Colleges?

What strategies are required to improve curriculum delivery at TVET colleges?

1.6 RESEARCH AIM AND OBJECTIVES OF THE STUDY

Research aim

The aim of this study is to explore curriculum related barriers to teaching and learning at TVET Colleges in the Eastern Cape Province.

Research objectives

The study will be guided by the following objectives:

- To determine how curriculum delivery can be a barrier to teaching and learning at TVET Colleges.
- To develop strategies required to improve curriculum delivery at TVET Colleges.

1.7 LITERATURE REVIEW

Literature review is defined as that which provides an overview of current, and sometimes not so current yet still sufficiently relevant, research appropriate to the researchers' topic and salient facets (Maree, 2012: 26). (See section 2.1). The researcher's interest is focused on literature related to curriculum related barriers to teaching and learning at TVET Colleges, the understanding of which will help lecturers and management to improve teaching. The literature reviewed concentrated on the following points which are briefly mentioned below as broad discussions are dealt with in Chapter Two.

- Definition of curriculum
- State of curriculum at TVET Colleges
- Definition of barriers in teaching and learning
- Lack of resources
- Work integrated learning
- Strategies to improve curriculum delivery

1.7.1 Definition of curriculum

Curriculum is defined differently by different writers. In order to understand the different writers' perspectives on curriculum more discussions on this is in section 2.2. One of the writers defines curriculum as what is to be taught and also involves thoughts, actions and purposes (Null, 2011: 1). From the different definitions the researcher has synthesised what she thinks is the best definition for the topic under discussion. (See section 2.2).

1.7.2 State of curriculum at TVET Colleges

TVET Colleges are new institutions that were established in order to cater for the youth and unemployed so that they can contribute to the economic development of the country and confidence to earn a living. The major programmes being run at these institutions are the NATED (Report 191) and the National Certificate Vocational (NC (V)) programmes. The TVET Colleges have been previously called Technical Colleges and so long ago, they were called Further Education and Training Colleges (FETC). The state of curriculum at TVET Colleges is broadly discussed in section 2.3.

1.7.3 Defining barriers in teaching and learning

Barriers are defined as an obstacle or circumstance that keeps people or things apart, it prevents communication and bars access to advancement (Landsberg, Kruger & Nel, 2008: 27). In order to understand barriers, the factors that have an impact on them and the types of learning barriers are identified. (See section 2.4).

1.7.4 Curriculum related barriers

These barriers are as the result of curriculum being viewed differently by writers. The view pertains sometimes to language and the understanding of it thereof. Section 2.5 gives further discussions on curriculum related barriers.

1.7.5.1 Lack of resources

Resources are a major requirement in order to effect teaching and learning. Therefore, the TVET Colleges need to make every effort to ensure availability of the resources for teaching and learning. Since these institutions are supposed to train students for the country's economy, the need for resources becomes an urgent one in order not to disrupt teaching and learning. Different resources have been identified that impact directly on teaching and learning. The resources and lack thereof are discussed in section 2.5.1.2.

1.7.5.2 Work Integrated Learning (WIL)

TVET Colleges are designed in such a manner that theory must be integrated with practice. The integration allows the student to appreciate what he or she learns in the classroom as it quickly applied in simulated or real working environment (DHET, 2013: 10). WIL also applies to lecturers as they come face-to-face with new technologies in a working environment. WIL enables the lecturers to be more hands-on and to relate theory to practice with ease. More discussions on WIL and lack thereof are discussed in section 2.6.

1.7.6 Strategies to improve curriculum delivery

Different ways of imparting knowledge to students should be devised in order to improve teaching and learning. The different ways of helping the students are in the form of strategies. Section 2.8 discusses in detail different types of strategies in order to help the students.

1.8 RESEARCH METHODOLOGY

1.8.1 Research approach and design

In research there are three main categories of research approaches, namely qualitative, quantitative and mixed method. This study will follow a qualitative approach. A qualitative research approach is concerned with understanding the processes and the social and cultural contexts which underlie various behavioural patterns and is concerned with exploring the 'why' questions of research (Maree, 2012: 51; Brynard & Hanekom, 2005: 28; Mouton, 2006: 56).

According to McMillan and Schumacher (2010: 37-38) this approach describes the design of study, selection and description of site. It can also describe the role of the researcher and defines how the researcher will gain entrance for interviews and observations. It also includes the time and length of the study, data selection and analysis strategies. Research approach describes the number of participants and how the researcher selected them for the study. In this study the researcher defined qualitative research approach as selecting and describing the site, defining how the researcher will gain entrance to the site, selecting participants and interviewing them. (See section 3.3 & 3.4).

The researcher adopted a qualitative case study design. A case study design is viewed as an in-depth analysis of a single entity (McMillan & Schumacher, 2010: 344). Mouton (2006: 55) defines a research design as a plan or blue print on how a researcher intends to carry out the study. It is a plan to find the nature of relationships between variables (Maree, 2012: 299). Research design can also be defined as the procedure to determine when, from whom and under what conditions the data will be obtained (McMillan & Schumacher, 2010: 20). (See section 3.2). In this study the researcher dealt with curriculum related barriers. The case in this study is one of the TVET Colleges in the Eastern Cape.

1.8.2 Population and sampling

Population is defined as an entire group of people or objects or events which all have at least one characteristic in common and just be defined specifically and unambiguously (Burns, 2000: 83). In this study the target population was the TVET College lecturers who taught in the NC (V) programme. (See section 3.3).

Sampling is the process used to select a portion of the population for study (Maree, 2012: 79). A sample is defined by Brynard and Hanekom (2005: 43) as a small group selected from a larger group for study purpose. In this study purposive sampling was used. Purposive sampling involves the researcher hand-picking the participants based on exact characteristics in order to develop a sample that is large enough yet possesses the required traits (Maree, 2012: 301). The sample selected by the researcher was nine NC (V) lecturers where the researcher is based.

1.8.3 Data collection techniques

In qualitative research observations, interviews, questionnaires, document reviews and audio visual materials are used (McMillan & Schumacher, 2010: 343). In this qualitative research study, the researcher will use interviews and document reviews.

1.8.2.1 Interviews

According to Maree (2012: 87) interview is a face-to-face process between the interviewer and participants to collect data and to learn about ideas and views of participants. Brynard and Hanekom (2005: 32) view interviews as allowing the explanation of questions that are not clear to participants. Interviews can be grouped into three different types such as semi- structured, structured interview and open-ended sometimes called unstructured. In this study the researcher will use mainly semi-structured interviews. Semi-structured interviews are defined as a list of predetermined questions posed to each participant in a sequential and consistent manner (Struwig & Stead, 2004: 98). On the other hand Maree (2012: 87) denotes that semi-structured interviews can be used to corroborate data emerging from other sources.

McMillan and Schumacher (2001: 40) concur with Struwig and Stead (2004) and Maree (2012) in that semi-structured interviews are phrased to allow responses from each participant.

The researcher will prepare an interview schedule with questions that are going to be used during the interview sessions with the participants. The interview schedule helps the researcher to ask same questions to the different participants at different times. The asking of similar questions will help the researcher to see how the different participants perceive curriculum related barriers in teaching and learning at the college.

1.8.3.2 Document analysis

Fraenkel and Wallen (1993: 389) describe document analysis as a process of analysing written or visual contents of a document, for example, textbooks, magazine articles, advertisements are all types of documents. In supporting Fraenkel and Wallen (1993), Maree (2012: 82) hold the view that when using documents to gather data, you must focus on all types of written communication that may shed light such as memoranda, faxes, letters, reports, emails and any document that will be related to the investigation. In this study, the researcher used notes from the academic board meetings and past year's examination analysis reports.

The following sub-section deals with data analysis.

1.8.4 Data analysis

Mouton (2006: 108) defines data analysis as involving 'breaking up' data into small themes, patterns and relationships that is manageable. McMillan and Schumacher (2010: 367) support Mouton (2006) in that qualitative data analysis is a process of organising data into categories and identifying patterns and relationships among categories. Maree (2012: 37) further indicates that researchers in the interpretive paradigm mostly prefer inductive data analysis which is more likely to help them identify multiple realities potentially present in the data. The researcher will organise data and separate it into few workable units (McMillan & Schumacher, 2010: 369).

The researcher will follow McMillan and Schumacher's (2010: 368) general process of inductive data analysis which are coding and unitising. Coded units will be grouped and categorised and the emerging themes will be used. In the following sub-section ethical considerations will be considered.

1.8.5 Ethical considerations

Ethics are generally concerned with beliefs about what is right and wrong from a moral perspective (McMillan & Schumacher, 2010: 117). According to Henning, Van Rensburg and Smit (2005: 73) once the interview plan is finalised, the process of ethical clarification can start. Firstly participants need to give informed consent to participate in the research. This means that the participants will be fully informed about the research purpose. Participants will be made aware that their privacy is confidential and what will happen with their information after recording.

The researcher will draft a letter of consent for each participant. Participants will be informed that the anonymity during and after the study will be kept. There will be no names linked to the data collected. The researcher will make use of codes or letters to record information. The letter of permission to conduct a research will be sent to the principal of the college where the research will be done. The research aims will be explained both to the participants and principal. In the next section the researcher will clarify the concepts related to the title of the study.

1.9 TRUSTWORTHINESS

The term trustworthiness is of the utmost importance in qualitative research. It implies the way in which the inquirer was able to persuade the audience that the findings in the study are worth paying attention to and that the research is of high quality (Maree, 2012: 305). There are different ways to strengthen trustworthiness, such as validity, credibility, applicability, conformability and member checking. The researcher chose to use validity and member checking to strengthen trustworthiness and these are discussed in the next sub-section.

1.9.1 Validity

Struwig and Stead (2004:143) state that validity also referred to as trustworthiness or credibility. In the same vein, Struwig and Stead define validity as the degree to which we can rely on the concepts, methods and inferences of a study or tradition of inquiry, as the basis for our own theorising and empirical research. Furthermore, McMillan and Schumacher (2010: 330) refer to validity as the degree of congruence between explanation of phenomenon and realities of the world. In other words it addresses questions such as do researchers observe what they think they see. Do researchers hear the meanings of what they think they hear? To enhance validity, the researcher will use multiple data collection methods such as interviews and document reviews that will lead to trustworthiness.

1.9.2 Member checking

Silverman (2005: 212) acknowledges member checking as respondent validation which suggest that we should go back to the subjects with our tentative results and refine them in the light of our subjects' reaction. Silverman (2005) concurs with McMillan and Schumacher (2010: 331) in that member checking can be done within an interview as topics are rephrased and probed to obtain more complete and subtle meaning.

1.10 CLARIFICATION OF CONCEPTS

In order to eliminate any misconceptions that might occur from the meanings attached to the individual concepts contained in the title of this research study, it is important to establish the scientific views linked to each of these terms: pedagogical barriers, Technical and Vocational Education and Training, Eastern Cape Province.

- Pedagogical barriers

Pedagogical barriers include inappropriate teaching methods as well learning and teacher support material. It also includes unqualified and under-qualified teachers, inappropriate assessment procedures and lack of support for teachers (DoE, 2012: 6).

- Technical and Vocational Education and Training (TVET) College:

TVET Colleges are part of the post-school education which were previously known as Technical Colleges. Recently, DHET (2013: 12) renamed these FET Colleges as TVET Colleges. The nature of these TVET Colleges is to train students in different vocational skills in order to be responsive to the needs of the industry.

- Eastern Cape Province:

South Africa is divided into nine provinces for governance and administration. The Eastern Cape is one of the nine provinces.

- National Certificate Vocational (NC (V)):

NC (V) is one of the programmes offered at TVET Colleges. The NC (V) was phased in at FET Colleges from January 2007. The qualification offered National Qualifications Framework (NQF) Levels 2, 3 and 4. The NQF level 2 was introduced in 2007, followed by NQF level 3 in 2008 and NQF level 4 in 2009. This means that the certificate will be awarded after a successful completion of each NQF level following a national external examination. The NC (V) courses are a year-long courses (DoE, 2007: 9).

1.11 OUTLINE OF THE STUDY

CHAPTER ONE: CONTEXTUALISATION OF STUDY

In chapter one the introduction and background of the study is done. Curriculum related barriers in teaching and learning at TVET colleges is explored. Motivation and significance of the study is given. The clarification of terms as well as ethical considerations are indicated.

CHAPTER TWO: LITERATURE REVIEW

Chapter two gives a survey of literature review to establish what other scholars and other researchers have written about curriculum related barriers in South Africa.

Different curriculum related barriers are discussed as well as the effects of curriculum related barriers in teaching and learning.

CHAPTER THREE: RESEARCH METHODOLOGY

Chapter three discusses research methodology and design. The research as a qualitative study is assessed. Data collection techniques are given.

CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION

In chapter four the analysis of the interviews and documents are presented. Codes and units are identified also categories from the codes were developed. Emerging themes from the developed categories are identified.

CHAPTER FIVE: CONCLUSION, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

Conclusions about the findings are presented. Limitations of the study as well as the recommendations for further research regarding curriculum related barriers in teaching and learning at TVET Colleges in the Eastern Cape Province of South Africa are submitted.

1.12 CONCLUSION

The introduction and background to the study was discussed in chapter one. The problem statement including main and sub-questions was highlighted. The aim and objectives of the study was also discussed. The research methodology was covered. Also, clarification of terms was given. The next chapter dealt with the literature review concerning curriculum related barriers in teaching and learning at TVET Colleges in the Eastern Cape Province in South Africa.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Chapter One focused on the background of the study, problem statement, motivation to embark on the study, aim and objectives of the study and significance of the study. The literature reviewed in this chapter focused on theoretical framework, state of curriculum at Technical and Vocational Education and Training (TVET) Colleges, curriculum related barriers, curriculum delivery and strategies to improve curriculum delivery. It is therefore hoped that a refined existing knowledge that will be collected from the current literature will provide answers to the research questions of this study.

2.2 THEORETICAL FRAMEWORK

This study was informed by human capital theory. Almendarez (2010: 3) sees human capital theory as resting on the assumption that formal education is highly instrumental and necessary to improve the productive capacity of a population. The above statement is relevant in the technical and vocational education and training colleges. In the TVET colleges students are given theoretical and practical training in order to be immediately productive where they will be employed. According to Almendarez (2010: 3) human capital theory emphasises how education increases the productivity and efficiency of workers by increasing the level of cognitive stock of economically productive human capability, which is a product of inborn abilities and investment in human beings. Human capital theory puts emphasis on investment in human capital as that will lead to greater economic outputs.

Human capital theory is relevant to this study as the educating of students both in theory and practicals enhances their abilities to comprehend. The combination of theory and practical allow students to practice and that they have a feel and understanding of what they are studying. Students are taught to think in a practical way as their studies are based on engineering studies.

According to Almendarez (2010: 5) some studies have shown that improvements in education accelerate productivity and contribute to the development of technology with

the resultant improvement in human capital. In order to advance human development, application of theory of human capital to educational systems becomes necessary. TVET colleges have as their main obligation to produce qualified artisans to be absorbed in the mainstream economic activities. It is therefore through formal education that the above is possible which the pillar of theory of human capital is.

Becker (2014: 2) citing Fischer (1946) emphasized the economic dimension of educational policy and the need to consider education as an instrument of economic policy. Becker argues that in the past human progress had been handicapped by neglect of human capital. He also alleges that the neglect of human capital was caused by limitations of imperfect system of education which created bottlenecks in the economic process due to the scarcity of skilled labour. Becker contends that education should be a privilege because it is not only improved the efficiency of the human capital but it also improved the quality of income distribution.

Almendarez (2010) and Becker (2014) seem to agree with each other about the importance of education in improving human capital. The researcher concurs with the above writers in that education and training should be in the forefront of the TVET Colleges in order to develop workers who are technically educated.

According to Sweetland (1996: 341) human capital theory suggest that individuals and society derive economic benefits from investments in people. It can be argued that the three writers (Almendarez, 2010; Becker, 2014 & Sweetland, 1996) see the benefits of training people in order to achieve high economic activities and in this TVET Colleges should be the major custodians of training students in order to help grow the economy of the country.

2.3 THE STATE OF CURRICULUM AT TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING COLLEGES

In the following sub-section, the definition of curriculum is done. Also, the international and

South African perspectives of the state of curriculum at Technical and Vocational Education and

Training colleges is discussed.

2.3.1 Defining curriculum

Different scholars define curriculum in a more diverse manner. Marsh and Willis (2007: 8) argue that the word curriculum is no easy matter. They state that curriculum has been derived from the Latin word 'root', which means 'racecourse'. They also hold the view that curriculum is a race to be run, a series of obstacles or subjects to be passed. Null (2011: 1) defines curriculum as what is to be taught and also involves thoughts, actions and purposes.

In this study, the researcher perceives curriculum as content with totality of learning experiences provided to students so that they can get general skills and knowledge to be applied in improving the economy of the country. This definition bodes well with the creation of the TVET Colleges that provide theoretical and practical skills to students.

2.3.2 The international perspective of curriculum at Technical and Vocational Education and Training Colleges

Macleane and Lai (2011: 2) state that the field of Technical and Vocational Education and Training

Colleges has changed throughout history. These changes are as the result of demands made upon

these colleges by the societies they serve. In some countries the TVET Colleges have fuelled extraordinary economic growth. Globalisation is forcing governments to take renewed interest in TVET Colleges. Maclean and Lai (2010: 3) also indicate that lecturers favour the integration of academic and technical curriculum. This curriculum entails learning sophisticated technological concepts which require a sound

foundation of mathematics, science, communication skills and also understanding of technology. Maclean and Lai (2011) also contend that curriculum must be transformed from mechanisms to deliver facts into mechanisms to promote and facilitate learning and thinking.

King (1993:212) asserts that the learning in the TVET College takes place according to common standards in any of the three locations which are the school, post-school training or the working. King (1993: 211) states that there are two complimentary developments going on in the training and delivery of vocational education. The first one is termed competency-based training which emphasises specialisation of particular knowledge and skills and their application to standards of performance required in the workplace. The second competency-based is a curricular development which concerns the regrouping of vocational specialisation. This regrouping of vocational specialisation enables considerable number of occupations to be developed at lower vocational schools and upper secondary school level. Contrary to the above, TVET Colleges in South Africa is offered only in the post-school environment.

2.3.3 South African perspective of the state of curriculum at technical and vocational education and training colleges

Prior to the implementation of the National Certificate Vocational (NC (V)) programme, the NATED programmes were offered by the colleges. These programmes were designed to support artisan development system in the Department of Labour as required by the Manpower Training Act of 1981 (Department of Education (DoE), 2006: 2).

In South Africa, there were 152 technical colleges which were offering the NATED programmes before 2002. After 2002 these colleges were merged into 50 multi-campus FET Colleges which came into being in 2002/3 (DoE, 2006: 3). During the years 2006/7 to 2008/9, the government had a major intervention in the college sector with its Recapitalisation programme which aimed to reposition the 50 colleges into vibrant and responsive institutions responsible for Education and Training of youth aged between 17 and 24 years (DoE, 2006: 3).

A new qualification now was born out of the need for purpose-driven and targeted development and resourcing of the FET colleges. The new curriculum for the NC (V) qualifications were developed by Department of Education during 2005/2006 and registered with South African Qualifications Act (SAQA) at National Qualifications Framework (NQF) Levels 2-4 and introduced in January 2007.

According to Umalusi (2007: 4) NC (V) is defined as a certificate awarded as a final exit qualification at the end of Levels 2 to 4 on the NQF to candidates who have complied with National Education Policy on the NC (V). This policy is published on the Government Gazette, No 28677 of 29 March 2006. To Check Umalusi 2007.

The purpose of the NC (V) is to enable the students to acquire the knowledge, practical skills, applied competences and understanding required for employment (Umalusi, 2007: 9). The employment is firstly found at an elementary level of a particular occupation or trade or class of occupation or trades in the case of Level 2 qualifications. Secondly, this employment is found at an intermediate level of a particular occupation or trade or class of occupations or trades in the case of Levels 3 qualifications (Umalusi, 2007: 9).

The government regards TVET College programmes as important for developing the skills base of the country (DoE, 2012: 4). The TVET Colleges form the major component of the National Skills Development Strategy. Department of Higher Education and Training (DHET) (2012: 12) indicates that the National Skills Development Strategy tries to address by requiring sector education and training authority (SETAs) to spend more on substantive courses leading to occupational, vocational and professional qualifications at TVET Colleges.

The TVET programmes are designed to directly respond to the priority skills demand of the modern economy (See section 1.1). DoE (2012: 4) also argues that there is a close relationship between the economic growth on the one hand and the vocational and training system. DoE also asserts that TVET college programs need continuous adaptation to respond to the changing need in the labour market. In this regard the

researcher sees the college programmes which offer theory and practical as partially empowering the students.

It is necessary to look at curriculum related barriers that adversely affect teaching and learning as these could have negative impact on the aims of the TVET programmes and literature review that is related to the impact of curriculum related barriers.

2.4 DEFINING BARRIERS IN TEACHING AND LEARNING

The concept of barriers can be defined as an obstacle or circumstance that keeps people or things apart, it prevents communication and bars access to advancement Landsberg, Kruger and Nel (2008: 27). In addition to the definition of the concept barriers Landsberg, et al. (2005: 363) state that in almost every classroom there are learners experiencing learning barriers. These barriers can either be severe or less severe. This experience is caused by some learners being able to achieve certain learning outcomes in a short period and others requiring more time. On the other hand Engelbrecht and Green (2001: 28) put it emphatically that learning barriers must not be seen as only residing within the learner but equally, if not more, within the learning system itself.

Barriers to learning may arise from a range of factors outside the learner and within the learner and within the community. These barriers might have impact towards the success of learners if there is no proper support system in place. Factors identified by DoE (2001: 7) that have impact on barriers to learning include the following:

- Lack of learning support materials and teaching aids
- Lack of human resource development strategies
- Language and communication and
- Inflexible curriculum.

DoE (2012: 3) further defines barriers to learning as difficulties that arise within the education system as a whole, the learning site and/or within the learner, which prevent access to learning and development for some learners. DoE gives the following types of the learning barriers:

- Systematic barriers: examples are overcrowded classrooms, lack of basic and appropriate learning materials and exclusionary policies and practices

- Societal barriers: example poverty, children living in the streets

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- Pedagogical barriers: examples are inappropriate teaching methods as well as learning and teacher support material, unqualified and under-qualified teachers, inappropriate assessment procedures and lack of support for teachers
- Intrinsic barriers: examples are barriers resulting from issues located within a learner such as neurological, physical and cognitive disabilities.

In summing up the definition of the concept barriers, the researcher perceives them as that which obstructs learning by the student and the interaction between the student and the system in totality. The researcher perceives this system as consisting of student, curriculum and the work integrated learning.

2.5 CURRICULUM RELATED BARRIERS

Umalusi (2008: 57) denotes that TVET College lecturers do not know where to turn to for advice about curriculum since there are no subject advisors for the TVET College sector. Also, Umalusi asserts that the NC (V) curriculum may demand a methodology which some lecturers are not familiar with. The NC (V) curriculum was perceived as being pitched at too high level with the theoretical component being too difficult. This aspect of the curriculum has been observed in the college during lecturing. The students turned not to follow well the subject content which is being delivered due to the new concepts which seemed difficult for them to grasp. It can be noted that entrance level to the NC (V) programme is grade 9, 10, 11 and 12. There is no differentiation of the students in the classroom with respect to their different grades (DHET, 2012: 22). There are various problems with this. Particularly problematic is that lecturers are teaching two different cohorts of students in the same classroom meaning those who have done grade 12 and those who left school as early as grade 9. The NC (V) programme which was launched in 2007 commenced with a country-wide shortage of textbooks and many educators were not prepared for the new content and methodology as they were not familiar with Outcomes –Based Education (OBE) (Papier, 2009: 29).

McBride, Papier and Needham (2009: 23-24) further indicate that lecturers regard the new NC (V) curricula as academically challenging resulting in the need for training in teaching.

In addition, the new curricula tested the limits of lecturer's subject matter knowledge. Also, lecturers complained about the curriculum being too broad and diffused and that examination requirements being too vague, making it difficult to know what was required of their learners, the curriculum emphasis and the depth required on a given topic. More concerning is that lecturers felt that the curriculum required a stronger content base and more subject specialism on their part. This search for information constitutes a major setback in terms of locating the required resources that enhanced teaching and learning.

The critical part being that it is required of lecturers to be able to access and source additional information to satisfy the knowledge component of curriculum. In the following sub-section the lack of understanding the language of teaching and learning is discussed.

2.5.1 Types of curriculum related barriers

2.5.1.1 Language as a barrier

Language is commonly described as the means by which a person learns to organise experiences and thoughts (DoE, 2010: 5-6). The language stands at the centre of the many interdependent cognitive, affective and social factors that shape learning. South African Constitution Section 29(2) of the Bill of Rights is unequivocal about the right of all to receive education in the official language of their choice in public education institutions, unfortunately although the Constitution affords learners the right to learn in the language of their choice this right is diminished by the state's ability to practically provide for its implementation (DoE, 2010: 5-6). Therefore, in the TVET College which is a public institution, the right of the students is tempered with as the language of teaching and learning is English.

2.5.1.1.1 Lack of understanding the language of learning and teaching

LoLT is commonly described as the language medium in which learning and teaching, including assessment, takes place (DoE, 2010: 3). According to Benson (2005: 2) instruction through a language that learners do not speak has been called 'submersion' as it is analogous to holding students under water without teaching them how to swim.

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Benson further indicates that this is compounded by chronic difficulties such as low levels of teacher education, poorly designed, inappropriate curricula and lack of adequate TVET College facilities, therefore submersion makes both learning and teaching extremely difficult particularly when the language of instruction is foreign to the lecturer. The researcher has observed that lecturers and students mainly come from the race groups speaking other languages other than the language of learning and teaching which is English. The language of teaching and learning which is English creates a major barrier that impacts on both the lecturer and student not understanding each other. This also results in the poor understanding of the concepts pertaining to the content.

Language has been and continues to be a barrier to access and success in higher education, both in the sense that African and other languages have not developed as academic language (Department of Higher Education and Training (DHET), 2002: 4-5). DHET (2002) emphatically state that the majority of the students filtering in higher education institutions are not fully proficient in English.

DHET (2002: 5) raise a concern facing higher education in that it has to ensure the simultaneous development of multi-lingual environment in which all languages are developed as academic languages while this is happening higher education should ensure existing languages of instruction do not serve as a barrier to access and success.

2.5.1.2 Lack of resources

Simelane (2010: 70) state that resources are a prerequisite for the effective implementation of NC (V) curriculum. The limited resources affect not only effective teaching and learning but also obstructs the understanding by the students. In the following sub-sections the types of resources are discussed.

2.5.1.2.1 Human resources development

Human resources development is defined as part of people management that deals with the process of facilitating, guiding, coordinating work-related learning and developments to ensure that individuals, teams and organisations can perform as desired (Gibb, 2011: 3).

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Furthermore it involves planning, through setting objectives for human resources development at work interventions to achieve specific kinds of outcomes. Also, can be defined as academic learning undertaken in institutions in the pursuit of qualifications in advance of employment (Gibb, 2011: 2). In this study the researcher looks at human resources development in the form of lecturer development at the TVET Colleges.

2.5.1.2.1.1 Lack of human resources development

Umalusi (2008: 57) denotes that TVET College lecturers do not know where to turn to for advice about curriculum since there are no subject advisors for the TVET College sector. When the NC (V) programme was launched in 2007 many lecturers were not prepared for the content and methodology of the programme since they were not familiar with the Outcomes-Based Education (OBE) (Papier, 2009: 29). Furthermore, McBride, Papier and Needham, (2009: 23-24) indicate that lecturers regarded the new curriculum as academically challenging resulting in the need for training in teaching. They also state that lecturers complained about the curriculum being too broad and diffused and that examination requirements being too vague, making it difficult to know what was required of their learners, the curriculum emphasis and the depth required on a given topic. They also state that lecturers felt that the curriculum required a stronger content base and more subject specialism on their part.

2.5.1.2.2 Physical resources

Physical resources can be defined as resources that you can feel, move and smell. These are normally resources that are made by man and help us do our daily activities much quicker and easier for example, desks, chairs, workshops and classrooms (Chowdhury, 2014: 1). According to the College leadership council of Lethbridge College (2013: 1) all physical resources belong to the college and are managed to support the institution's mission, mandate and strategic objectives. The college

allocates physical resources such as space, equipment, furnishings, department and employees for their use and proper management. Also, the college can on its own discretion reallocate physical resources that it deemed necessary to meet changing needs and priorities.

2.5.1.2.2.1 Lack of physical resources

According to Round Table Working Document (2010: 57-58) TVET Colleges argue that their facilities, largely shaped by their technical model, do not allow them to easily absorb larger student groups and force them into having undesirably low student and staff ratios. Colleges further indicate that the NC (V) programme approach demands simulated work or practical learning at the TVET College campus and many claim that they do not have specialised facilities where practical learning can be simulated successfully. The simulated learning is equipment intensive and presents a further challenge to TVET Colleges Round Table Working Document (2010, 57-58). Colleges lack tools and equipment for practical education (Education, Training and Development Practices Sector Education and Training Authority (ETDP SETA), 2012: 5).

The researcher views this as a critical matter in the provision of teaching and learning. This presents some difficulties in integrating theory and practical. The preceding statement is corroborated by McGrath (2006: 138) when stating that the National Committee on Further Education Draft Report painted a damning picture of colleges as having a lack of adequate plant and infrastructure.

2.5.1.3 Technical and Vocational Education and Training funding

In terms of the funding norms and standards, funding of TVET Colleges is in the form of formula funding of programme (DHET Government Gazette 37970, 2014: 6 & Shepard & Ntenga, 2014: 249). This funding take into account a range of service delivery issues including type of programme being offered, the NC (V) and Nated Report 191 programmes, Full-time Equivalent (FTE) students, cost of delivery including staff, infrastructure requirements and the ability of colleges to utilize resources efficiently. Grijpstra (2015: 41) further indicates that funding at TVET

Colleges is based on the student enrolment and throughput. This fund is paid on a two yearly retrospective basis.

2.5.1.3.1 Lack of Technical and Vocational Education and Training College funding NC(V) engineering related design programme requires expensive equipment as it has to deal with assessments and integrated summative assessment task (ISAT) which forms part of the practical assessment for the vocational subjects and weighs 30% towards the examination mark (DHET, 2014: 17). The students cannot be allowed to write examinations without the ISAT mark. In order for these students to do practicals they need equipment, materials, and personal protective equipment (PPE) that is necessary as safety aspects in the workshop.

2.6 WORK INTEGRATED LEARNING (WIL)

DHET (2013: 10) defines WIL as involving learning in and from practice. Learning in practice includes teaching in authentic and simulated lecturing environments. Learning from practice involves the study of practice using discursive resources to analyse different practices across a variety of TVET context drawing from case studies and lesson observations in order to theorise practice and form a basis for learning and practice. WIL must encompass learning the technical skills associated with the subjects and how to teach them (DHET, 2013: 10).

DHET further indicates that lecturers practice includes both learning to teach and learning skills, techniques and practices-related to the subject they are teaching that are applied in the workplace. In order for lecturers to be able to integrate the subject content which they teach and the practical, they should already have been in the work situation where they experienced the work environment related to their subject which they offer.

The workplace based component of WIL for TVET lecturer qualifications takes place in two types of settings DHET (2013: 19). The first types are the teaching settings which are classroom, college workshops and laboratories. The second types of

settings are industry based settings which are factory, work sites and offices. This workplace based component of WIL should be structured, supervised, integrated into the learning programme and spread across the programme and must be formally assessed.

2.6.1 Lack of work integrated learning on lecturers

McBride, Papier and Needham (2009: 11) observed that there is a total lack of work experiences amongst lecturers. McBride et al. (2009: 15) further state that overlap between teaching qualification and workplace experience and between teaching qualifications and previous teaching experience provides insights into routes that the TVET College lecturers take into TVET Colleges and the diversity of the TVET College lecturer work force. They also argue that 70 % of the lecturers have not seen the workplace environments for the past five years.

DHET (2012: 24) state that many lecturers in academic subjects like language, mathematics and science entered colleges with school teaching qualification but little industry experience. Some lecturers are college graduates who completed their N6 courses and many of them have limited subject content knowledge and little if any workplace experience. It is therefore the view of the researcher that lecturers should be exposed to work-based integrated learning in order to enhance integration of theory and practice. This workplace integrated learning will eventually help lecturers involved in the workshop environment to be efficient in what they are doing.

2.6.2 Lack of work integrated learning on students

Students graduating from TVET Colleges and programmes funded by SETAs are not finding work easily (DHET, 2013:64). These students are regarded by employers as not having the skills needed. Students who completed NC (V) are unable to get work experience in order to improve their chances of getting employment (DHET, 2015:3).

Also, many students are unable to practice in their professions due to a lack of access to WIL. On the same note, employers have been slow to recognise how partnerships with education and training institutions might enhance the relevance of education for

potential employees and lead to improved organizational performance. The researcher has noted with concern large numbers of students who exited NC (V) programmes were not getting workplace experience with the result that some managed to take up any available employment. Some NC (V) students who exited the system are working as cashiers, waiters at the restaurant and petrol attendants.

2.7 THE IMPACT OF CURRICULUM RELATED BARRIERS ON EFFECTIVE TEACHING AND LEARNING

2.7.1 The impact of lack of language of teaching and learning

According to Edqual Brief Policy (2010: 1) textbooks written in English are difficult for learners

to read. Teaching and learning is obstructed by the unavailability of textbooks in the local African language of instruction. Nel and Muller (2010: 636) assert that other factors that contribute to poor second language (L2) acquisition and academic is that students lack access to newspapers, magazines and lack opportunity to hear or to speak English. These students also lack reading materials at home at the colleges and poor language teaching by lecturers whose own English proficiency is limited. This results in lecturers teaching students who are unable to cope with learning. It is therefore perceived by the researcher that the language of learning and teaching is most problematic due to the fact that TVET sector has multi-lingual students and lecturers.

2.7.2 The impact of lack of resources

2.7.2.1 The impact of lack of human resources

Jia, Norton and Xiao (2014: 37) contend that in China lecturer shortage at TVET Colleges restricts development. The shortage becomes significantly apparent on two aspects, these being high ratio of students to teachers and the imbalance of general course lecturers, specialised course lecturers and practical instructing lecturers. Rasool and Mahembe (2014: 12) state that human capital approach has its roots in the industrial revolution and the philosophy of productivism. According to this approach

TVET Colleges are perceived to have a fundamentally instrumental function in providing the necessary human capital required by industry.

Several factors have impacted on the supply of appropriately trained lecturers in TVET Colleges (DHET, 2009: 13), some of which are:

- The need for the lecturers to be experts in the areas that they teach
- They are lured by better packages and contracts in the private sector which results in sudden staffing gaps for TVET Colleges
- They do not have pedagogy or teaching experience, this becomes costly for TVET Colleges to ensure that the lecturers are trained and qualified in appropriate areas
- Some of the lecturers are close to retirement which makes it difficult for them to engage in formal study to upgrade their qualifications or up-skill in the required professional areas.

2.7.2.2 The impact of the lack of physical resources on effective teaching and learning

Maclea and Lai (2014: 7) regard the cost of construction, equipment, maintenance and provision of consumable training materials as constantly recurring problem in the TVET Colleges. These problems have a major impact on TVET finance, lecturer training, curriculum development and delivery of instruction. They contend that if one of the above issues is diminished it negatively affects the others.

O'Connor (1997: 1) contends that where resources and facilities—teachers, textbooks, teaching aids are inadequate, the lecturing approach tends to be lecturer-centred. The availability of educational materials such as textbooks and manuals impacts on educational quality (United Nations Educational, Scientific and Cultural Organisation (UNESCO), 2012: 5). According to Education, Training and Development Practices

Sector Education and Training Authority (ETDP SETA) (2012: 5) the equipment in workshops where present are out-dated, bearing little resemblance to the technologies currently in industry. Due to the fact TVET Colleges are poorly resourced the education and training remains theoretical and graduates are not considered more skilled than their academic counterparts by the labour market.

2.7.2.3 The impact of lack of funding on effective teaching and learning

According to McGrath (2006: 152) the lack of funding will impact on the rehabilitation and improvements of building and facilities. The TVET college sector is struggling in developing a new financial model that can address both rehabilitation and future quality provision (McGrath, 2006: 155). Even though TVET institutions can be well funded, they eventually experienced financial difficulties.

2.7.2.4 The impact of inadequate lecturers and students work-integrated learning on effective teaching and learning

Lecturers are unable to impart teaching and learning to their students that enables integrating learning and theory (DHET, 2012: 24). The lack of WIL can result in the lecturers missing out of the technological advances that the industry have experienced. The researcher views lack of WIL as disadvantaging both the lecturers and students.

2.8 STRATEGIES TO IMPROVE CURRICULUM DELIVERY

2.8.1 Defining teaching strategies

Black (1999: 120) defines strategies as methods or techniques that the lecturer uses to teach content knowledge in the classroom and to transfer this knowledge to the students. The knowledge of the difference between rote learning and learning with understanding depends on the type of teaching strategy used in the classroom. In support of the statement by Black (1999) Ademe (2010: 371) argues that teaching strategies are general ways in the implementation process that answers the question of how. These strategies used depend on the learning outcomes and content of the lesson. In order that the lesson can be executed well, a variety of strategies must be

used to impart knowledge in a range of learning opportunities which are suited to the needs of all students (Fisher, 1998:37).

It is important to note that learning and understanding of the content, teaching strategies must be correctly applied. These strategies help the students to learn the content according to the specific style that the student prefers.

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The chosen strategy should be able to create opportunities for the students to use their own preferences. It is therefore important that the lecturer uses the correct strategy in order to achieve the appropriate learning outcomes. With respect to the different views offered by the different writers about teaching strategies, the researcher perceives teaching strategies as ways of helping students with different abilities. These strategies enable the students to acquire knowledge in one's unique manner.

2.8.2 Strategies for lesson planning

Killen (2010:125-338) provides the following teaching strategies:

- Direct strategy
- Discussion
- Small-group work
- Co-operative learning
- Learner research
- Role- play
- Case study
- Demonstration
- Writing

The researcher discussed few of the strategies which are direct instruction, case study and demonstration. Wehrli and Nyquist (2003: 1-5) gives the following advantages of each of the chosen strategies.

2.8.2.1 Direct instruction

Direct strategy is a direct personal interaction between teacher and learner, and may involve giving information, demonstrating, questioning, problem-solving, directing

learners' work, observing and assessing learners' performance and providing feedback.

The advantages of this strategy is that the students are actively in a natural work environment. It also allows for individualized approach tailored to specific needs of the learner and also provides practice to build skills and problem solving in real situations with expert supervision.

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2.8.2.2 Case study

A case study consists of five to ten students who address a case based task. The students exchange points of view while working through a problem solving process. The advantages of this strategy are that the students are actively involved and peer group learning is stimulated. It also helps participants explore pre-existing knowledge and build on what they know. Furthermore this strategy facilitates exchange of ideas and awareness of mutual concerns. Lastly, it promotes development of critical thinking skills.

2.8.2.3 Demonstration

Demonstration is the performance of an activity so that the learners can observe how it is done in order to help prepare student to transfer theory to practical applications. The advantage of the strategy is that the students are actively involved. It can provide challenges that can lead to confidence in knowing and expressing the material. It provides feedback and a fun learning environment.

The researcher has selected the three types of strategies as they apply directly to NC (V) programme. This programme is geared towards integrating theory and practical which is hopefully achieved by the selected three types of teaching strategies.

2.9 STRATEGIES TO IMPROVE LANGUAGE OF TEACHING AND LEARNING

According to DHET (2002: 5) the strategy to improve the language of learning and teaching is to develop a multi-lingual environment in which all languages are developed as academic languages. That will help in terms of enabling all students to study in the language of their choice. Alliance for Excellent Education (2005: 2) assert

that there are six key strategies that used to identify good teaching skills that lecturers plan lessons which are accessible to a range of students.

- Vocabulary and language development: This strategy is used by lecturers to introduce new concepts by discussing vocabulary words key to the concepts.
- Guided interaction: It is a strategy whereby lecturers structure lesson to that students work together to understand what they read for example, reading, listening, by speaking and writing collaboratively about academic concepts.

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- Metacognition and authentic assessment: Here rather than having students simply memorise information, lecturers' model and explicitly teach thinking skills that are crucial to learning new concepts.
- Explicit instruction: This strategy directly teaches concepts, academic language and reading comprehension strategies needed to complete classroom tasks.
- Meaning-based context and universal themes: This strategy involves taking something meaningful from students' lives and use it as a springboard to interest them in academic concepts.
- Modelling, graphic organisers and charts: This strategy uses a variety of visual aids which include pictures, diagrams and charts that are helpful to all students. These visuals make use of both language and content more accessible to students.

2.10 STRATEGIES FOR HUMAN RESOURCES DEVELOPMENT

According to Papier (2010: 154) college lecturers require extensive training to deliver and assess the NC (V) programmes within an outcomes-based orientation.

The initial vocational education programmes will have to take cognisance of what, how, lecturers are required to teach in order to remain relevant and respond to lecturer's and learner's needs. In order to achieve this aim, the areas of knowledge that must be considered in the professional tasks of vocational teachers are stated as explicit knowledge, which means educational, subject and teaching knowledge, formal knowledge of the education system, implicit knowledge as in practical work and vocational pedagogical skills, and informal knowledge of the educational context (Papier, 2010:154).

Corroborating the views by Papier (2010), Akoojee (2008: 310) contends that TVET College lecturers represent a crucial component of the skills development challenge offerings, improvements in the quantity and quality of teaching staff is needed. The need for lecturer development is echoed by DHET in its Strategic Plan (2010/11-2014/15) that states the need to provide lecturers and trainers with meaningful opportunities to upgrade their skills and meet the challenge as well as provide and support staff development and exposure for TVET lecturers to link classroom experiences with practical, work-based experiences (ETDP SETA, 2012: 16).

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It is the view of the researcher that the lecturer development should be a major focus of the TVET College. Lecturers are the major implementers of the curriculum. If lecturers do not understand their subjects they are teaching and have limited ways of imparting the content, negative effects will result. There can be lack of understanding by students which can result in high failure rates.

Human resources are necessary to carry out teaching and learning in the TVET Colleges. Jia, et al. (2014: 31) contend that TVET lecturers in China are different from general education teachers as they have their own independent education and training system and professional pathways. China has colleges for vocational technical training for lecturers. In trying to strengthen lecturer training China has appointed enterprises as providers of TVET lecturer practical skill training limit that provide internships for pre-service lecturers and skill up-date for in-service teachers. They also emphasise that the problems of shortage and low quality of TVET lecturers can be improved through rebuilding the TVET College lecturer education and training system by strengthening the co-operation and educational institutions and industries. Also by building a more open and diversified TVET lecturer team system by increasing the number of lecturers from the non- traditional pathway (Jia, et al. 2014: 43, 37). The non- traditional pathway focuses more on lecturer's work experience rather than on a diploma and certification.

HRDC (2014: viii) recommend the following strategies to improve human resources:

- A performance appraisal system tailored to TVET Colleges that includes Professional Development Plans should be developed and implemented

- A holistic Continuous Professional Development (CPD) model should be devised that includes professional qualifications, coaching, mentoring, peer observation and feedback
- Lastly, continued partnership with industry for lecturers to be able to continuously upgrade their knowledge of cutting edge industry innovation.

2.11 STRATEGIES TO IMPROVE PHYSICAL RESOURCES ON EFFECTIVE TEACHING AND LEARNING

Different strategies are required for TVET Colleges to access most needed physical resources. MacLean and Lai (2011: 7) assert that most of TVET systems utilised cost-recovery, industrial levies, linkages with enterprises and as well as employer participation mechanisms to address lack of physical resources. The above strategies can help assist in the improvement of resources.

2.12 STRATEGIES TO IMPROVE FUNDING AT TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING COLLEGES

Public and private sector partnership is regarded as one of the best avenue for expanding participation in TVET funding (Maclean & Lai, 2011: 9). These writers note that TVET Colleges can use cost-recovery as a strategy and this strategy has traditionally been used as an option to make funds. They also state the importance of using student or trainee fees for TVET with exemptions for unemployed and government sponsored trainees. According to McGrath (2006: 155) there is a need to revisit the relationships between the TVET sector and the levy grant system, especially the National Skills Fund (NSF).

2.13 STRATEGIES TO IMPROVE WORK-INTEGRATED LEARNING FOR LECTURERS

TVET Colleges should partner with private sector in order to improve work-integrated learning. According to Human Resource Development Council (HRDC) (2014: viii) there is a need to create working partnerships between TVET Colleges and their

stakeholders particularly industry. The partnership is borne out of the intention to make TVET Colleges responsive to the needs of stakeholders which is, but not limited to the labour market. Also, the continued partnership with industry enables lecturers to be able to continuously upgrade their knowledge of cutting edge industry innovation. The researcher is of the opinion that the continued lecturer engagement with industry will improve the hands-on experience and ability to link theory and practice.

McBride et al. (2009: 12) indicate that Department of Education Framework for TVET College lecturer development proposed teaching qualification with a three years' work experience in the case of vocational lecturers and subject matter qualification. The workplace experience in the education of the lecturers should be seriously considered if lecturers' understanding of the workplace relative to what they are teaching is regarded as important for training of their students. It can then be said that those lecturers need to be introduced into work integrated learning.

2.14 STRATEGIES TO IMPROVE WORK- INTEGRATED LEARNING FOR TVET STUDENTS

DHET (2013: 65) maintain that access to workplaces for students in vocational education must be increased in a variety of work-integrated learning. An important form of WIL is artisan training through apprentices or learnerships which are now used to produce artisans in the Engineering. SETAs need to work with TVET Colleges and South African Institute for Vocational and Continuing Education and Training (SAIVCET) on sector-relevant curriculum and materials with a focus on integrating theoretical and workplace learning (DHET, 2013: 64). SETAs can also assist TVET Colleges to develop collaborative partnership with employers in a number of sectors. DHET (2013) should ensure that there is a National Artisan Moderating Body (NAMB) established to monitor quality of artisan training and testing, to assure the quality of trade tests and trade testing system and also to make recommendations to the Quality Council for Trades and Occupations (QCTO) on certification of artisans.

2.11 CONCLUSION

Chapter Two dealt with the definitions of curriculum, state of curriculum at TVET colleges, barriers, WIL, strategies and curriculum related barriers. From the literature reviewed it was clear that there was not a single way of defining curriculum. The researcher had to synthesise from the different definitions of curriculum in order to come up with personal definition related to the study.

Different barriers such as lack of understanding of language of teaching and learning, lack of resources, lack of funds and lack of physical resources were discussed. Also, lack of Work Integrated Learning and teaching strategies were discussed. In the next chapter the researcher discusses the research methodology used.

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1 INTRODUCTION

In Chapter Two, the researcher examined literature related to the title of this study. The following items were reviewed in Chapter Two: definition of curriculum, state of curriculum at Technical and Vocational Education and Training Colleges, definition of barriers in teaching and learning, curriculum related barriers, the impact of the barriers in teaching and learning and strategies to improve curriculum delivery. Chapter Three outlines the detailed description of the research methodology that has been used to generate empirical evidence to answer the research questions. This chapter has been structured as follows: detailed explanation of research approach and design, the population and sampling, data collection techniques, the explanation of data analysis, trustworthiness and lastly, ethical considerations.

3.2 RESEARCH APPROACH AND DESIGN

Lee (1991) cited by Maree (2012: 51) state that quantitative and qualitative are two different approaches based on different paradigms and different assumptions about ontology and epistemology. Based on the above statement, Struwig and Stead (2004: 13) contend that qualitative research reflects certain approaches to knowledge production. It can therefore, be useful to consider qualitative research as any research that uses qualitative data. In this case qualitative data refer to any information that the researcher gathers that is not expressed in numbers. The qualitative data include information such as words. Quantitative research approach maximise objectivity by using numbers, statistics, structure and control (McMillan & Schumacher, 2010: 21).

In this study qualitative approach will be used. Denzin and Lincoln (1994: 2) view qualitative as multi-method in focus, involving interpretive naturalistic approach to its subject matter.

McMillan and Schumacher (2010: 12) assert that qualitative research is based on constructivism which assumes that multiple realities are socially constructed through individual and collective perceptions.

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Maree (2012: 51) concurs with McMillan and Schumacher (2010) in that qualitative research studies people by interacting with and observes the participants in their natural environment and focus on their meanings and interpretations. Similarly Conrad and Serlin (2006: 407) view qualitative research as allowing the researcher to use more than one method of data collection.

A research design is defined as a plan or blue print of how you intend conducting a research (Mouton, 2006: 55). Similarly, Maree (2012: 299) is of the view that research design is a plan of how to proceed in determining the nature of relationship between variables. Maree (2012: 299) corroborates with Creswell (1994: 154) who maintains that a research design represents the plan according to which relevant data are collected. There are several modes of inquiry in qualitative design which include but not limited to ethnography, case study and grounded theory (Maree, 2012: 3).

In this study, the researcher selected a case study as a mode of inquiry. McMillan and Schumacher (2010: 344) view case study design as an in-depth analysis of a single entity. Case study allows an investigation to retain the holistic and meaningful characteristics of real life events (Burns, 2000:461). A case study employs primarily categorising analysis strategies; their main advantage is that the categorising occurs within a particular case rather than between cases, so that the contextual relationships are harder to lose sight of (Maxwell, 2012: 114). Maree (2012: 266) concurs with McMillan and Schumacher (2010) in that a case study design is used to provide an in-depth understanding of the phenomenon and used to establish trustworthiness of the information by collecting data from different sources. The researcher used a variety of

sources such as interviews and document analysis to gain in-depth knowledge of curriculum related barriers.

The next section deals with population and sampling.

3.3 POPULATION AND SAMPLING

Research population is a set of elements or cases, whether individuals, objects or events that conform to specific criteria and to which we intend to generalise the results of the study (McMillan & Schumacher, 2010: 129). Similarly, Strauss & Cordin (1990: 46) describe research population as a large collection of individuals or objects.

As previously mentioned by McMillan and Schumacher, 2010, Strauss and Cordin, 1990, Burns (2000: 83) also believes that population is an entire group of people or objects or events which all have at least one characteristic in common, and must be defined specifically and unambiguously. In this study, the research population was lecturers in the NC (V) Engineering Department of the TVET College in the Eastern Cape where the researcher is based.

The sample is claimed as being a small group selected from the larger group for the purpose of the study (Brynard & Hanekom, 2005: 43). Generally, the sample is much more economical in time, effort, and money to obtain information for only some of the population elements rather than for all. When we select some of the elements with the intention of finding out something about the population from which they are taken, we refer to that group of elements as a sample (Maruyama & Ryan, 2014: 231).

There are different types of sampling in qualitative research. McMillan and Schumacher (2010: 327) list the following types of sampling in qualitative: comprehensive sampling, maximum variation sampling, snowball sampling and sampling by case type. In this study the researcher used purposive sampling. Johnson and Christensen (2004: 220) observe that there are many different types of purposive sampling used in qualitative research. According to Johnson and Christensen (2004:

220), purposive sampling is employed to select a small group with a similar background for intensive study. The researcher has chosen purposive sampling to select lecturers that have more than three years experience in the N C (V) programme.

The following section dealt with qualitative data collection techniques used in this study.

3.4 DATA COLLECTION TECHNIQUES

Qualitative research make use of various types of data collection techniques (Conrad & Serlin, 2006: 379; McMillan & Schumacher, 2010: 343). McMillan and Schumacher (2010: 343) hold the view that in qualitative research there are five major data collection methods namely, observation, questionnaires, document analysis, interviews and audio visual materials. In this regard the researcher used interviews as a data collection methods and document analysis.

The importance of selecting these data collection techniques are dealt with in the next sub-section.

3.4.1 Interviews

An interview can be defined as a face-to-face process between the interviewer and participants to collect data and to learn about ideas as well as views of participants (Maree, 2012: 87). In the same vein, Leedy and Ormrod (2005: 146) regard interviews as being conducted to discover facts, behaviours, and beliefs, present and past behaviours and to discover why participants think that a particular behavior is allowed. Cohen, Manion and Morrison (2007: 355) state that the aim of qualitative interviews is to achieve the following:

- Engaging, understanding and interpreting the key feature of life of the participants
- Use natural language to collect and understand qualitative knowledge
- To focus on specific ideas and themes but avoid being too tightly structured.

Interviews are grouped into semi-structured, structured and unstructured interviews (Maree, 2012:87). In this study, the researcher focused on semi-structured interviews.

Struwig and Stead (2004: 98) define semi-structured interviews as serving as a list of predetermined questions posed to each participant in a sequential manner.

An interview schedule list was drawn by the researcher which had a list of questions that had to be used in the course of an interview. The interview schedule that the researcher drew ensured that the same type of questions were posed to each participant being interviewed (Patton, 2002: 343).

3.4.2 Document analysis

Fraenkel and Wallen (1993: 389) describe document analysis as a process of analysing written or visual contents of a document such as textbooks, magazine articles, and advertisements. . In supporting Fraenkel and Wallen (1993), Maree (2012: 82) states that when using documents to gather data, you must focus on all types of written communication that may shed light such as memoranda, faxes, letters, reports, emails and any document that will be related to the investigation. In this study, the researcher used minutes and reports from the academic board meetings and past years examination analysis reports which were related to the study. The next subsection dealt with data analysis.

3.5 DATA ANALYSIS

Henning, Van Rensburg and Smit (2005: 101) describe data analysis as a process requiring craftsmanship and has the potential to capture the understanding of data in writing. Qualitative data analysis is defined as an inductive process of organising data into categories and identifying patterns and relationships among categories (McMillan & Schumacher, 2010: 367). Tech (1990: 154-156) explains more by providing steps in defining data analysis which are as follows:

- The researcher firstly reads through all the transcripts, to make sense of the whole
- The researcher selects any script to read and ask what it is all about
- Then, writes down possible themes and group similar themes
- Listing all the emerging themes and group similar themes
- Themes are coded and codes written next to appropriate segments of the text
- Themes are made categories and then grouped together.

Since this is a qualitative research study, the researcher has used inductive data analysis. In this regard the researcher used the general process of inductive data analysis as defined by McMillan and Schumacher (2010: 368). The general process of inductive data analysis entails recording data, coding and categorising and formation of themes. During the process of data analysis, the researcher transcribed the interviews, established related units, codes and categorise similar

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codes and formulated the themes. The themes were used to discuss the research questions which enabled the researcher to get to the main aim of the study. The next section deals with how the researcher dealt with issues of trustworthiness.

3.6 TRUSTWORTHINESS

The term trustworthiness is of the utmost importance in qualitative research. . It implies the way in which the inquirer was able to persuade the audience that the findings in the study are worth paying attention to and that the research is of high quality (Maree, 2012: 305). There are different ways to strengthen trustworthiness, such as validity, credibility, applicability, conformability and member checking. The researcher chose to use validity and member checking to strengthen trustworthiness and these are discussed in the next sub-section.

3.6.1 Validity

McMillan and Schumacher (2010: 331) discuss different strategies that are used to enhance validity. In this study the researcher has used the participants language of teaching and learning which is English. This strategy is used when the interviews are phrased in the participants' language. In this case the researcher used the transcribed text taken during the interviews. The second strategy is the use of mechanical recorded data.

This strategy uses digital recorders and this type of strategy provides accurate and relatively complete record. Thirdly, the researcher used multi method strategies that permits triangulation of data across inquiry techniques. In this regard the researcher used document reviews and interviews in order to validate the data.

3.6.2 Member checking

Member checking can be done within an interview as topics are rephrased and probed to obtain more complete and subtle meaning (McMillan & Schumacher, 2010:331). After having done the transcript of the interviews, the researcher returned to participants so as to comment and confirm the actual interview. The opportunity given to the participants enabled them to validate the data generated through interviews (Babbie & Mouton, 2001: 275).

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3.7 ETHICAL CONSIDERATIONS

McMillan and Schumacher (2010: 117) maintain that ethics are generally concerned with beliefs about what is right and wrong from a moral perspective. In addition to this Henning, Van Rensburg and Smit (2005: 73) hold the view that once the interview plan is finalised the process of ethical clarification can start. Maree (2012: 306) maintains that when working with individuals it is important to understand and pay attention to ethical issues. The researcher has taken into consideration the following ethical issues:

The researcher applied for ethical clearance certificate from Research Ethics Committee at Unisa. After the permission was granted by the Ethics Committee, the researcher wrote a letter to the Department of Higher Education and Training requesting permission to conduct a study at the college.

Having been granted permission by the Department of Higher Education and Training, the researcher had applied and obtained permission from the College Principal to conduct research on the identified college. The researcher wrote a letter to the Campus Manager to gain access to the site in order to conduct interviews. Access to the site was granted and the researcher gained entrance. Letters of consent were given to the selected participants. All sources used were acknowledged in order to avoid plagiarism.

The following ethical issues were clearly stated: That the participants had the right to anonymity during the study and the information was treated confidentially. The researcher informed the participants that their participation on the study was voluntary and that the participant had the right to withdraw at any time during the study.

3.8 CONCLUSION

This chapter dealt with research approach and research design. The different types of research approaches were defined. The research design used by the researcher was also discussed. Different qualitative designs were discussed and choice taken by the researcher was also discussed. The population and sampling were discussed with the reasons for selecting the sampling techniques was explained. Furthermore data collection techniques were discussed as well as the reasons for the choice of techniques used were provided. Data analysis and data analysis types were discussed. Lastly, issues of trustworthiness and ethical consideration were considered.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

In Chapter Three, the research methodology and design as well as the data collection strategies used in this study were presented. The presentation included a qualitative research methodology following a case study design. Semi-structured interviews and document reviews were the instruments used to obtain information for this study.

Chapter Four presents an analysis and interprets the data collected during the empirical study. The data analysed and interpreted was collected from written documents and individual interviews with participants at Technical and Vocation Education and Training College (TVET). The two sets of data collection instruments that is, interviews and document reviews are presented separately in this chapter. The purpose of presenting these data collection instruments separately was to make the reader aware of the type of data to be analysed. Data analysis was presented using codes developed from the interview data. The categories were developed from the units resulting in themes which served as research findings. The next sub-section deals with background information.

4.2 BACKGROUND INFORMATION

As indicated previously (see section 1.6.1), the purpose of this study was to explore curriculum related barriers at TVET colleges.

The study was guided by the following questions.

Main question:

What are curriculum related barriers to teaching and learning at TVET Colleges?

Sub-questions:

- What are curriculum delivery related barriers to teaching and learning at TVET Colleges?

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- How can curriculum delivery be a barrier to teaching and learning at TVET Colleges?
- What strategies are required to improve curriculum delivery at TVET Colleges?

The aim of this study was to explore curriculum related barriers at TVET Colleges.

The study was guided by the following objectives:

- To determine curriculum delivery related barriers to teaching and learning at TVET Colleges
- To determine how curriculum can be a barrier to teaching and learning at TVET Colleges
- To develop strategies to improve teaching and learning at TVET Colleges.

The study took place in the Engineering and Related Design campus at the FET College. In the campus three elective programmes are run where students choose between Fitting and Turning, Automotive Repair and Maintenance and Welding. The researcher intended to interview nine participants but two of them withdrew from the interview. Seven participants were interviewed using semi-structured interviews. Interviews with participants took place in the college staffroom at a time agreed upon immediately after college time and in some cases during free periods of the participants.

Firstly participants needed to give informed consent to participate in the research. This means that the participants were fully informed about the research purpose. They were made aware that their privacy was confidential and what would happen with their information after recording. The researcher drafted a letter of consent for each participant. Participants were informed that the anonymity during and after the study would be kept. There would be no names linked to the data collected. The researcher

made use of codes or letters to record information. The letter of permission to conduct a research was sent to the principal of the college where the research was done. The research aims were explained both to the participants and principal. As stated in chapter 1.8.5, the following ethics were taken into consideration:

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- The right to privacy
- The right to confidentiality and anonymity
- The right to full disclosure about the research
- The right not to be harmed in any manner
- The right to refuse to be interviewed
- The right to refuse to answer telephonic or e-mail questionnaires
- The right to refuse to answer any questions

Profile of participants will be dealt with in the next sub-section.

4.3 PROFILE OF PARTICIPANTS

Nieuwenhuis (2012: 103) state that in data processing the useful first step is to give a complete description of your participants. That is the number of participants, how they were selected, and also their relevant background data such as age, sex, occupation, education as well as an in-depth discussion of the context in which the study was done. Accordingly, Porter, Kongthon and Lu (2002: 351) provide the aims of profiling in research as to augment, not replace the traditional literature review, thereby helping to carry out the purposes of understanding the structure of the subject, important variables, pertinent methods and key needs. Participant profiling play an important role in this study as it gave the researcher important information about experience and the qualifications of participants. The information about participants was accessed from the requested campus documents used in statistical analysis of results of the final year end results of learners. The information about the profile of participants was requested from the Human resource department. The profile of participants is depicted in Table 4.1 below.

Table 4.1: Background information of participants

AGE GROUP	GENDER	ARTISAN& TEACHING QUALIFICATION	TEACHING QUALIFICATION WITH TRADE	NO	ARTISAN WITHOUT TEACHING QUALIFICATION	TEACHING EXPERIENCE IN YEARS
30-39	Male				1	6
40-49	Male and Female		1		1	4-8
50-59	Male and Female	1	2		1	9-15

Data analysis process is discussed below.

4.4 DATA ANALYSIS PROCESS

Henning, van Rensburg and Smit (2004: 101) define data analysis as a process requiring analytical craftsmanship and has a potential to capture the understanding of data in writing. Data analysis involves breaking up data into small themes, patterns and relationships that is manageable (Mouton, 2006: 108).

According to Tech (1990: 154-156) there are six steps to analyse data and these are:

- The researcher firstly reads through all the transcripts, to make sense of the whole
- The researcher selects any script to read and ask what it is all about.
- Then, writes down possible themes and identifies main themes

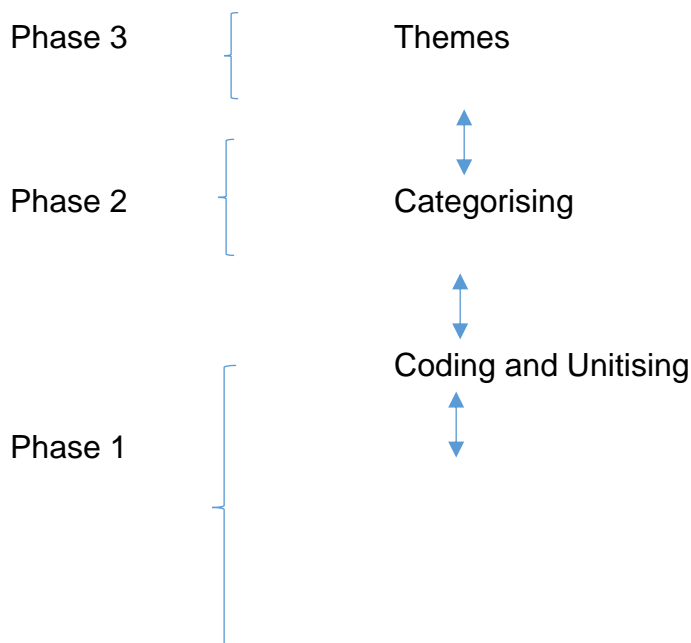
- Listing all the emerging themes and group similar themes
- Themes are coded and codes written next to appropriate segments of the text
- Themes are made categories and then grouped together

As indicated previously (see 1.8.4), the researcher chose to follow a qualitative inductive analysis process suggested by McMillan and Schumacher (2010: 368) which has four different phases but for the purpose of this study only three phases as

illustrated in Figure 4.1 below were used. An inductive analysis is the process through which qualitative researchers synthesise and make meaning from the data, starting with specific and ending with categories and patterns (McMillan & Schumacher, 2010: 367). Maree (2012: 109) concurs with McMillan and Schumacher (2010) in that when the researcher works inductively with emergent categories, the researcher has to read through the identified codes and find themes or issues that recur in the data which then become categories. Qualitative data analysis is an inductive process of organising data into categories and identifying patterns and relationships among categories (McMillan & Schumacher, 2010: 367). For the purpose of this study, themes were used.

A qualitative template analysis style was selected to analyse data for this study. This template analysis style was chosen because it applies derived sets of codes and categories to the data and usually derived from the research questions (McMillan & Schumacher, 2010: 368).

The process of data analysis is depicted in Figure 4.1 below.



Data



Field work: recording.

Figure 4. 1: General process of inductive analysis

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In the following sub-sections, analysis from interview data as main data collection tool was followed by analysing data from documents.

4.4.1 Interview data analysis

As described in 4.4 above, the inductive analysis of the interviews will be done. The researcher had adopted the three phase system of analysing data from interviews which were coding and unitising, categorising and themes (McMillan & Schumacher, 2014: 368; Maykut & Morehouse, 1994: 135 & Struwig & Stead, 2004: 170-171).

Seven participants were interviewed that have different qualifications. Data was analysed according to the following three phases which are:

Phase 3: Themes

Phase 2: Categorising

Phase 1: Coding and Unitising

The following paragraph focuses on coding and unitising interview data.

4.4.1.1 Coding and unitising

According to Maree (2012: 105) coding means reading through your transcribed data line by line and divide it into meaningful analytical units. Coding also refers to marking the segments of data with symbols and descriptive words. In this study, the researcher read through the transcribed data and underline words or key words used as a form of code.

Unitising refers to identifying units of meaning in the data to serve as a basis to select categories (Struwig & Stead, 2004: 176). A unit may be a sentence, a word or a theme. The researcher has used unitizing as follows:

- Looking at the participants' answers and underlining boldly keywords or a phrase.

The following excerpt served as an example of unitised interview data.

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When the research question was posed 'What major curriculum-related barriers do you experience in the activities of teaching and learning?', participant X answered as follows:

*'The major one is the **lack of equipment** for instance in the practical theory we are **battling to get all the equipment relevant**. Due to our learning program, **we need to have expensive machines**.*

Participant Y stated other reasons that contributed to major curriculum-related barriers in teaching and learning.

*Well, our **students do not understand the English language**, and **their level of understanding English is very low** as **they have grade 9 and 10** and their **books are not written in easy to understand language**.*

The underlined phrases were identified as the major barriers in teaching and learning. Having coded and unitised the data, the following section looked at how units were categorised.

4.4.1.2 Categorising interview data

McMillan and Schumacher (2010: 376) state that categories or themes are entities comprised of grouped codes.

Categories represent major ideas that are used to describe the meaning of similarly coded data. Related codes are combined into categories (Maree, 2012: 108). In this study, the researcher grouped related units in order to form a category. An example of how units are categorised is given below (see Diagram 4.1).

Units

Categories

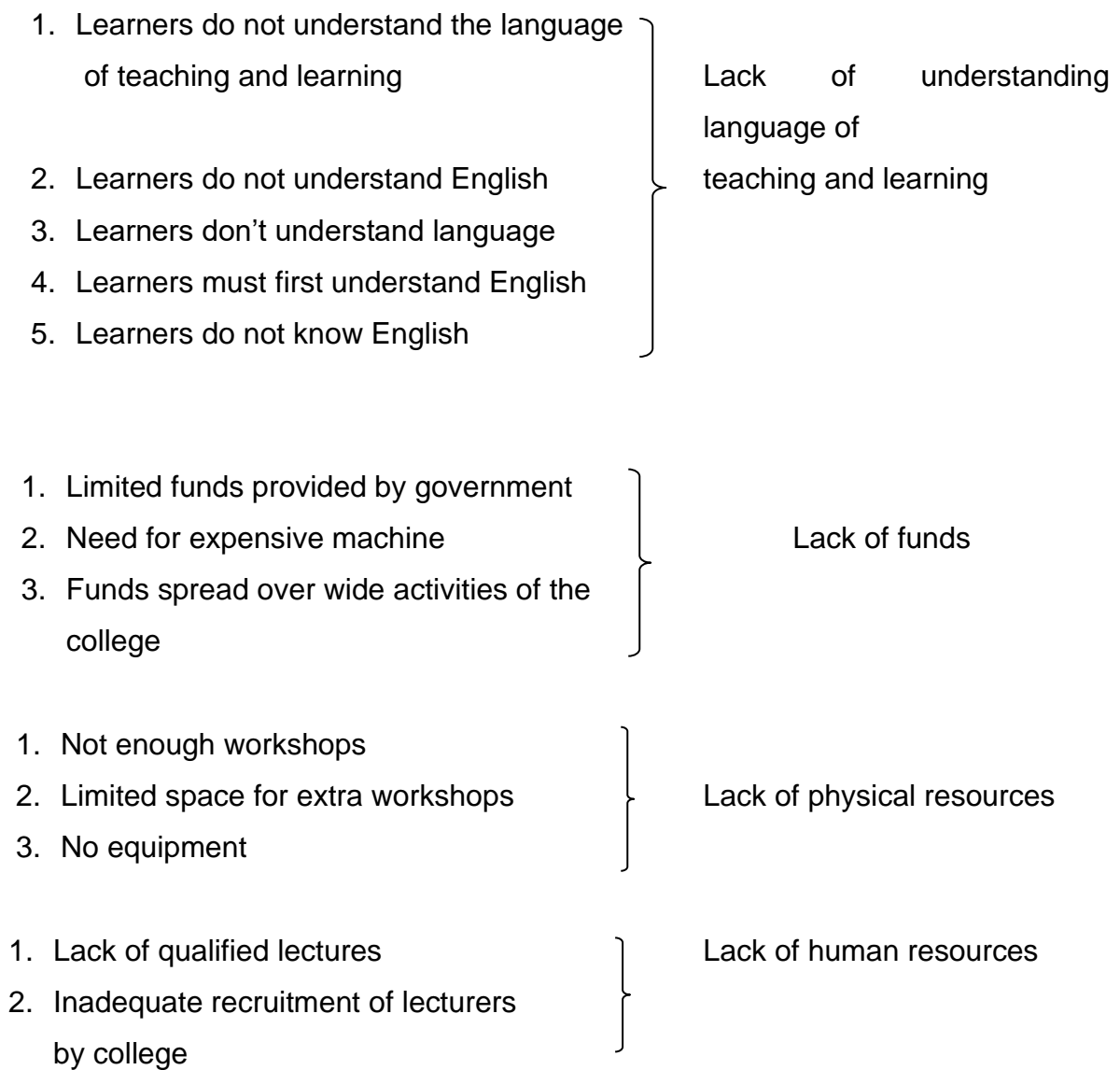


Diagram 4.1 Development of categories

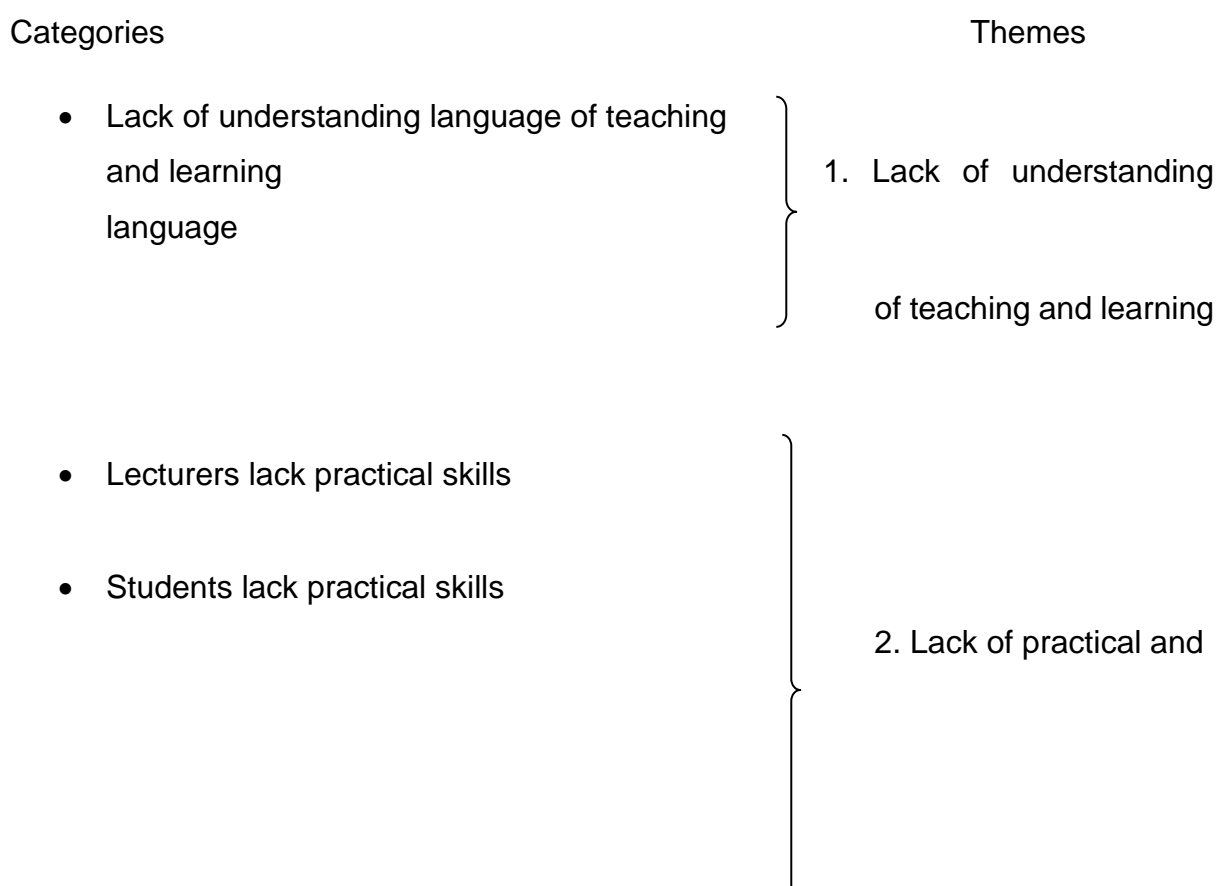
Two examples of categories were used above. The first four units were found to be related and thereby forming one category. The second category was formed by five related units. After the units have been categorised, the next step was to develop themes which emerged from the combined categories.

Categories are further grouped into themes which served as research findings. Formation of themes were discussed in the following section.

4.4.1.3 Formation of themes

Themes may occur when there is a repetition of terms and typologies that may assist in generating analytical patterns or themes (Ngulube, 2015: 141) citing Braun and Clarke (2006). According to Bryman (2012: 580) a theme is defined as a category identified by the analyst through his or her data that relates to his or her research focus. Also, a theme builds on codes identified in transcripts. Finally, a theme provide the researcher with the basis for a theoretical understanding of his or her data that can make a theoretical contribution to the literature relating to the research focus.

Examples of themes are depicted in Diagram 4.2 below. As stated in sub-heading 4.4 Figure 4.1, the identified themes served as research findings.



- Students are unable to link theory and practical work integrated learning (WIL)
- No opportunity given to students to practice in industry

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- Lack of human resources
- Lack of physical resources
- Lack of funds



3. Lack of resources

Diagram 4.2: Development of themes

The researcher combined related categories and formed three themes which are discussed in the next chapter. In the following section, document analysis is discussed.

4.4 DOCUMENT ANALYSIS

In this study the following documents were analysed and scrutinised at the research site.

- 2009 end of the year National Certificate Vocational results
- 2011 end of the year National Certificate Vocational results
- Notes taken from the academic board meeting

The analysis was done using Tech (1990) steps as quoted in Chapter 3 paragraph 3.9.

Also Nieuwenhuis (2012) Chapter 3, paragraph 3.4.2 state that these documents can be memoranda and reports. The researcher analysed documents that were collected from the college where this study took place.

The college end year results analysis report document provided all the lecturer performance from level 2 to level 4. Each subject was analysed per level. The performance of each lecturer and the pass rate was contained on the document. The reasons for poor performance were provided by each lecturer. The document revealed that some subjects taught by under qualified lectures had a very low pass rate. The notes taken from the academic board meeting revealed that there was a lack of resources at the college. Also lecturers' lack of work experience was highlighted.

4.5 THE SUMMARY OF IDENTIFIED CODES, UNITS, CATEGORIES AND THEMES

Table 4.2: Units, Categories and Themes

1. Curriculum related barriers to teaching and learning

Units	Categories	Themes
Learners do not understand the language of teaching and learning Learners do not understand English Learners must first understand English Learners do not know English	Lack of understanding language of learning and teaching	Lack of understanding language of learning and teaching
Lack of qualified lecturers Inadequate recruitment of lecturers by the college	Lack of human resources	Lack of resources
Need for expensive machinery Not enough workshops No equipment No videos in the classroom	Lack of physical resources	
Limited funds provided by the government Funds spread over wide activities of the college	Lack of funds	
No opportunity given to lecturers to practice in industry Lecturers lack work based experience Lecturers unable to link theory with practical	Lecturers lack practical skills	Lecturers lack of practical and WIL

No opportunity given to learners to practice in industry	Students do not do practical training	Lack of work-integrated learning on students
Students unable to link theory with practical	Students unable to link theory with practical	
Students do not do practical projects		
Students not able to do simulation work in the workshop		
Students are unable to link theory with practical		

2. How can curriculum delivery be a barrier to teaching and learning at TVET Colleges?

Units	Categories	Themes
Learners are unable to understand the content of the subject	Learners have difficulty to understand the content	Students are unable to understand the content
Textbooks written in English are difficult for learners to read	All learning materials are written in English	
Learners lack access to reading materials		
Lecturers are unable to deliver the subject matter to learners	Lecturers are not properly trained to deliver on NC(V) curriculum	Lecturers are not well trained on NC(V) curriculum
Lecturers are inadequately prepared for the lesson delivered		
Lecturers are not properly trained to deliver NC(V) curriculum		
Learners are not able to do practical work	Inability of learners to do practical work	Inability of students to complete practical work on time
Overcrowding in the workshops		
Learners are unable to identify basic hand skills equipment		
Lecturers are unable to do demonstrations in the workshops		
Not enough workshops	Not enough material for practical work	Students not getting proper tuition
Not enough raw materials for practicals	Few learning aids	

Not enough teaching materials Not enough classrooms Shortage of staff		
Lecturers do not have confidence to teach work-related skills Lecturers cannot link theory with practical Lecturers are reluctant to do practical in the workshops	Lecturers do not have competence to teach practical skills Lecturers do not have confidence to conduct practical to the students	Lecturers incompetent in practical work
Students cannot do practical work Students lack confidence to do practical work	Students are unable to do practical work effectively	Students unemployability

3. Strategies to improve curriculum delivery

Units	Categories	Themes
Language use in textbooks needs to be at a level learners can understand Teaching in both English and African language By improving lecturer capability through professional development Have reading materials written both in English both at home and at college	Learners to study both in English and African languages Lecturers to undergo professional development to improve communication with students	Learners to study both in English and African languages Lecturers to develop multi-lingualism through professional development
Employ competent lecturers Employ lecturers that have both teaching qualification and industry work experience Continuous development of lecturers Scheduled class visits by Heads of division	Continuous professional development of lecturers	Professional development of lecturers
Get obsolete material from industry Continuous maintenance of available equipment Upgrade existing equipment instead of buying new equipment Lecturers must use models	Get obsolete material; maintain existing equipment and use models	Obsolete material; maintain equipment and use models
Use cost-recovery to make funds	Cost recovery; linkages with private sector	Use cost recovery strategy

Use of industry levies		
Linkages with enterprises and employer participation mechanism		
College partnership with industries Experienced lecturers to help novice lecturers in the workshops Exposure to simulated work-environments	Link theory with practical through work-based exposure of lecturers and learners	Exposure to work-integrated learning of lecturers and learners

4.6 CONCLUSION

Chapter Four presented the responses of the interview from the participant relating to the research question, aim and objectives of the study. Participants gave their different responses relating to the interview questions. Data was coded, categorised and themes were formed which strived to answer the research questions. From the three research questions, the following themes were developed and are discussed in chapter Five.

From question 1 which is: 'What are curriculum barriers in teaching and learning at TVET colleges?', the following themes were developed.

- Lack of understanding language of teaching and learning
- Lack of resources
- Lack of practical and WIL

From question 2 which is: 'How can curriculum delivery be a barrier to teaching and learning at FET colleges?', the following themes were developed.

- Students unable to understand the content
- Lecturers are not well trained on NC(V) curriculum

- Inability of students to complete practical work on time
- Lecturers incompetent in practical work
- Students unemployability

From question 3 which is: 'What strategies are required to improve curriculum delivery at TVET colleges?', the following themes were developed.

- Students to study both in English and African languages
- Lecturers to develop multi-lingualism through professional development
- Professional development of lecturers
- Obsolete material; maintain equipment and use models
- Use cost-recovery strategy
- Exposure to WIL of lecturers and students

CHAPTER FIVE

DISCUSSION OF FINDINGS, RECOMMENDATIONS, LIMITATIONS OF THE STUDY AND CONCLUSIONS

5.1 INTRODUCTION

In the previous chapter, analysis of data and empirical findings were presented. Units, codes, categories were identified from the data generated during interviews. After analysis of data, themes were developed. In this chapter, conclusions, recommendations and limitations of the study are presented. The study aims to explore curriculum related barriers at Technical and Vocational Education and Training Colleges in the Eastern Cape Province.

5.2 OVERVIEW OF THE STUDY

Attention to the background of the study as well as motivation to embark on the study was discussed in chapter 1. The research question as well as sub-questions that serve as a cornerstone for the study that were formulated were given in this chapter.

Chapter 2 served to present the review of literature related to the curriculum barriers.

In chapter 3, the research design and research methodology was highlighted and explained in details. Data collection instruments that were used such as semi-structured interviews and documents were analysed.

Chapter 4 presented the analysis of data. Units, codes, categories and themes were identified from the data generated during interviews and document analysis. On curriculum related barriers, the following themes emerged: lack of understanding language of teaching and learning (LOLT), lack of resources, lack of Work-Integrated Learning (WIL) on lecturers and lack of WIL on students. On impacts of curriculum related barriers, the following themes emerged: learners unable to understand the content, lecturers are not well trained on NC (V) curriculum, inability of learners to complete practical work on time, lecturers incompetent in practical work, and students unemployability. On strategies required to improve curriculum delivery, the following themes emerged: learners to study in English and African Languages, lecturers to

develop multi-lingualism through professional development, professional development of lecturers, obsolete material, maintain equipment and use models, use cost-recovery strategy and exposure to WIL of lecturers and students.

5.3 CURRICULUM RELATED BARRIERS

5.3.1 Lack of understanding language of learning and teaching

The study revealed that the majority of learners that join FET colleges do not understand the language of teaching and learning. Some of these learners do not have technical background which means in teaching Fitting and Turning, Automotive Repair and Maintenance and Engineering Science, the lack of technical background makes it not so easy for them to understand the language used in the content. As participant B stated:

Well our students do not understand language, do not understand English, the textbooks that we are using are not easy for them. They must first understand English that is not their mother tongue.

The above comment is in line with section 2.5.1.1.1 where it was stated that instruction through a language that learners do not speak has been called 'submersion' as it is analogous to holding students underwater without teaching them how to swim (Benson, 2005: 2). To add to what Benson is saying in Ghana and Tanzania teaching and learning is obstructed by the unavailability of textbooks on the local African Language of Instruction (EdQual, 2010: 1). The researcher understands that in the South African Technical and Vocational Education and Training (TVET) Colleges most textbooks are unavailable that are written in African Languages.

5.3.2 Lack of resources

5.3.2.1 Lack of human resources development

The participants revealed that the majority of lecturers teaching in the NC (V) programme were not developed, which explains their lack of content knowledge of NC (V) curriculum. This statement is supported the research done by Papier (2009: 29) in section 2.5.1.2.1.1 when stating that TVET College lecturers were not prepared for

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the content and pedagogy of the programme since they were not familiar with the Outcomes-Based Education (OBE). As participant Y said:

I was not trained but had to seek advice from those who have experience. Lecturers who were trained are complaining that they were only trained for three successive days because first day was for introduction and the last day people were in a hurry to go home.

McBride, Papier and Needham (2009: 23) in section 2.5.1.2.1.1 support participant Y when saying that lecturers regard NC (V) curriculum as academically challenging resulting in the need for training. The researcher is of the view that if lecturers could be equipped with the relevant training before they go into the classroom, NC (V) curriculum would not be perceived as difficult.

5.3.2.2 Lack of physical resources

The participants also revealed that teaching resources were a major obstacle. Most of the participants stated that the resources they required were workshop equipment, internet and textbooks. Participant B alleged that:

The college does not have relevant textbooks, machinery and equipment.

Participant Y stated:

We explained to students something they have totally never seen and touched before. We would speak about parts of machinery and they do not have a picture of what you are talking about. You might talk about different types of materials and you do not have a sample to say this is a mild steel or brass so that they can physically see the difference.

Education, Training and Development Practices Sector Education and Training Authority (SETA), (2012: 5) in section 2.5.1.2.2.2.1 supports the finding by saying that colleges lack tools and equipment. McGrath (2006: 138) further supports the above by stating that the National Committee on Further Education Draft Report painted a damning picture of colleges as having a lack of plant and infrastructure.

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Lack of resources can hinder effective teaching and learning. Some students end-up deregistering and stay absent from the college. In the college where the researcher is based there is a dire need for the physical resources to aid the lecturers and students. These resources could make a marked difference as the students can see what is being said and can also get some practice in the relevant sections of their work.

5.3.2.3 Lack of Technical and Vocational Education and Training funding

The participants revealed that when equipment and training are requested, the college always responded that there is not enough money budgeted for the requested equipment and training.

Participant X stated:

When we request equipment, the management complains that the college does not have money.

Participant M said:

When I request special training, the college management says that we do not have funds.

From the participants views, researcher perceived the need for funding by the college as critical as it helps the lecturers and students to have all equipment they need for that specific subject.

5.3.3 Lack of work-integrated learning on lecturers

The lack of WIL on lecturers is one of the major challenges that obstruct the effectiveness of teaching and learning. The study revealed that lecturers were not exposed to work –integrated learning. Participant M stated:

Lecturers are not sent for experiential training to expose them to different industry processes that can help them to integrate theory and practical. For instance, lecturers need basic training such as safety awareness and working on machinery.

The research revealed that lecturers had not been exposed to experiential training in industry. McBride, Papier and Needham (2009: 15) in section 2.6.1 supports the above statement in that there is a lack of work experiences amongst lecturers.

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They further indicated that 70 % of the TVET lecturers have not seen the workplace environment for the past five years. The researcher sees the need for WIL on lecturers as important in order to have a better understanding of what is happening in the industry as well as better application of theory in the classroom situation.

5.3.4 Lack of work-integrated learning on students

The participants revealed that TVET College students are not exposed to work-integrated learning. Participant Z said:

The students need to know the real component of the machine. The second Participant Y added:

Students do not have time to do projects and practicals. The third Participant M also indicated:

Students should be given more practical.

DHET (2015: 3) in section 2.6.2 support the above finding by saying that the NC (V) students are not getting work experience in order to improve their chances of employment. The researcher perceives that lack of WIL on students affects

performance as they cannot link theory with practical. On the other hand students are unable to get trade certificates as they lack the WIL experience.

5.4 THE IMPACTS OF CURRICULUM RELATED BARRIERS

5.4.1 Learners unable to understand the content

The research revealed that learners do not effectively follow when lesson is delivered. Participant Y said:

In some instances with a theory subject, you explain and experience a situation where a learner does not understand properly what you are explaining to them.

Also Participant B concurred with participant Y by saying:

Well, the books we are using are not easy.

EdQual Brief Policy (2010: 1) as stated previously in section 2.7.1 supports the finding by saying that textbooks written in English are difficult to read.

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Nel and Muller (2010: 636) supported the above when indicating that one of the major factors that contribute to second language acquisition is that students lack the opportunity to read written materials that are in English. They also ascertain that these learners are taught by lecturers whose own English proficiency is limited. The researcher agree with the above statement that textbooks written in English are not so easy for students who have passed grade 9 and 10 in order to do the NC (V) programme. The language used in the textbooks is not easy for the learners to understand. The researcher supports the statement that teaching and learning takes place in English. It would be better if learners are allowed to learn in their home languages.

5.4.2 Lecturers are not well trained on NC (V) curriculum

This research has revealed that the majority of the interviewed participants at the college had not been trained on NC (V) curriculum which explains their lack of understanding of the content of

NC (V) curriculum. Participant X said:

I was not trained on the NC (V) curriculum before taken to the classroom situation.

Participant B explained:

Well, the curriculum of the TVET Colleges is too advanced.

Mabale (2012: 1) supports the participants when stating that lecturers find it difficult to implement the new NC(V) curriculum. The researcher agrees with the participants in that not all lecturers were provided with training by the Department of Education during the implementation of the NC (V) curriculum in her college.

5.4.3 Inability of learners to complete practical work on time

The research revealed that learners were unable to complete practical work due to lack of physical resources.

Participant Y said:

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The challenge currently with the curriculum is that as much as it is designed to prepare students for a working environment we are not getting enough equipment on time.

ETDP SETA (2012: 5) in section 2.7.2.2 supports with participants' view when stating that the equipment in the workshop where present is outdated, bearing little resemblance to the technologies currently in industry. The researcher sees the importance of physical resources as playing a major role in the teaching and learning of the students. The college must ensure that lecturers have all the necessary resources before going to the classroom and workshop to enable learners to practice well and be able to complete their practicals.

5.4.4 Lecturers incompetent in practical work

The study revealed that participants are not comfortable to do practicals for students at the college.

This lack of interest is as the result of lecturers being incompetent in terms of practical work and knowledge of workshop processes.

Participant Y reported:

Lecturers need to have background knowledge of welding knowledge before being able to show it to the students.

Participant M said:

The college should provide further training skills for lecturers so that they can enhance their practical skills.

DHET (2012: 24) in section 2.7.2.4 supports the finding when indicating that lack of WIL can result in the lecturers missing out on the technological advances that the industry have experienced.

The researcher assumes that lack of WIL takes out the confidence of the lecturer in conducting the practical with students. The lecturer cannot be able to assist students if he or she lacks confidence in practical skills.

5.5 STRATEGIES TO IMPROVE CURRICULUM DELIVERY

5.5.1 Lecturers develop multi-lingualism through professional development

DHET (2002: 5) in section 2.10.1 suggest that to improve the language of teaching and learning lecturers must develop a multi-lingual environment where all languages are developed as academic languages. Also Alliance for Excellent Education (2005:2) has provided six key strategies to improve the language of learning and teaching see section 2.10.1.

In view of the above statement, the researcher supports DHET (2002) since the constitution of the country affords equal rights to all languages in the country.

5.5.2 Professional development of lecturers

The study revealed that lecturers need to be sent on training in order to be effective in teaching and learning.

Participant M said: *College should train lecturers.*

Participant N stated: *Lecturers need technological skills and teaching diploma.*

McBride et al. (2009: 12) in section 2.10.5 supports the above statement by saying that Department of Education Framework for TVET College lecturer development proposed teaching qualification with a three years' work experience. The researcher is of the view that TVET College lecturers should be involved in Continuous Professional Development (CPD).

5.5.3 Obsolete material, maintain equipment and use models

The research revealed that the college should form partnership with the industry sector.

Participant N said:

Colleges need to form partnership with private sector so that the colleges can get assistance from the private sector.

DHET (2012:15) supports the participant when saying that SETAs can play a central role in promoting the growth of partnerships between educational institutions and various private and public employers. Maclean and Lai (2011: 7) in section 2.10.3 give the following strategies to improve funding: cost-recovery, industrial levies and linkages with enterprises as well as employer participation mechanisms to address lack of physical resources.

The researcher has a view that with private sectors being involved with colleges, the college can benefit in getting all the material that industry wants to dispose which will be of value to educational purposes. The equipment that is available must be maintained and record kept of the maintained equipment.

5.5.4 Exposure to work-integrated learning of lecturers and students

The research revealed a need of WIL for lecturers and students.

Participant Z stated:

Lecturers need technical skills. I think lecturers need the background knowledge of the subject by associating with private sector.

Human Resource Development Council (HRDC) (2014: viii) in section 2.10.5 supports the participant when stating that continued partnership with industry enables lecturers to be able to upgrade their knowledge of cutting edge industry innovation. DHET (2013: 65) in section 2.10.6 suggest that access to workplace for students in vocational education must be increased in a variety of work-integrated learning.

5.6 RECOMMENDATIONS

The aim of the study was to explore curriculum related barriers at Technical and Vocational Education and Training Colleges in the Eastern Cape Province. From the findings, the researcher would suggest the following:

- The lecturers and students need to be exposed to work-integrated learning for a period of 18 weeks. The exposure to work-integrated learning will give both lecturers and students ample opportunities to understand the work environment.

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- The colleges should build partnership with private sectors. The partnership will help the TVET Colleges to send their students and students for experiential training and to get obsolete material.
- The DHET need to revisit the policy of the NC (V) curriculum. Revisiting policies of the NC (V) curriculum will help to cater for the different grades of students. This means that the different grades of students must not be mixed in the same classroom.
- To make funds available at the college, the college should use a variety of strategies such as cost-recovery, industrial levies. These strategies will enable the TVET Colleges to have funds to improve teaching and learning activities.
- Textbooks must be written at a level of the NC (V) students. If the language used is at the level of students, it will be much more understandable than using difficult technical language especially in vocational subjects.
- The college must maintain its own equipment in order to keep them in good working condition. The maintenance of equipment by the TVET College will help funds to be kept within the college. Also regular maintenance will render the equipment useable at all time.

- Upgrade workshop machines with machines that are on the market. Upgrading the existing workshop machines will save a lot of funds that can be used for other teaching and learning activities.

5.7 RECOMMENDATIONS FOR FURTHER STUDY

The researcher recommends further study on the effect of second language lecturers that are teaching in multi-cultural institutions in teaching and learning. This is due to the different cultures prevailing at the colleges. The researcher recommends research on how lecturers and management can interact to solve teaching and learning problems at FET Colleges. Further research is recommended on how to increase retention rate of students from level 2 to level 4 since less students are certified at the end of level 4.

5.8 LIMITATIONS OF THE STUDY

The limitation of the study was that the researcher intended to interview nine participants but only seven participants availed themselves. Since the research was done only at campus level, it therefore cannot be generalised to other campuses as well as other colleges in the Eastern Cape Province.

5.9 CONCLUSION

This study explored curriculum related barriers at Technical and Vocational Education and Training Colleges in the Eastern Cape Province. The qualitative study found that there are various curriculum barriers that exist in the Colleges. These were related to a lack of understanding the language of teaching and learning, lack of resources, lack of WIL. Various recommendations were made by the researcher in order to mitigate the effects of curriculum related barriers to teaching and learning. And also the findings of the study can be used by the Department of Higher Education and Training and other institutions of learning.

APPENDICES

APPENDIX A: LETTER OF REQUEST TO CONDUCT RESEARCH TO
DEPARTMENT OF HIGHER EDUCATION

104 Stemele Street

Kwa-Magxaki

Port Elizabeth

6201

17 July 2014

The Department of Higher Education

Private bag X174

Pretoria

0001

Dear Sir

Re: Request to conduct research

I am Nompumelelo Rina Lingela, a student researcher for M. Ed (Socio-Education). As a student I am required to conduct research to complete my dissertation in fulfilment of the requirements of my degree. My research title is: **Curriculum related barriers at Further Education and Training Colleges in the Eastern Cape.**

I would like to ask permission to conduct research at Eastcape Midlands College in the Eastern Cape Province. I have already written a letter to the CEO of the college. My research will involve interviewing lecturers and reviewing relevant documents. The interview will involve nine lecturers. It will be individual face-to-face and semi-structured interview which will take ten minutes per participant. There will be no financial implications and no risks anticipated.

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The interviews will be tape recorded. All information that will be shared will be kept confidential. The identity of participants will remain anonymous.

Any personal details will be kept confidential. Participants are free to withdraw from the study at any time during the research.

The results of this study will contribute towards the improvement of teaching and learning at the institution.

Upon completion, a copy of the dissertation will be made available to the college. For more information or clarity you can contact me at 0731731200/linonge@webmail.co.za or my supervisor Dr Matome Malale at 012 429 2914/malalmm@unisa.ac.za.

I thank you in advance and look forward to your positive response.

Yours faithfully

Lingela N.R.

APPENDIX B: PROOF OF REGISTRATION

0759 M1RST

LINGELA N R MISS
204-0
104 STEMELE STREET
KWA-MAGXAKI
POSTGRADUATE QUALIFICATIONS
KWADWESI
6201

STUDENT NUMBER: 4740-

ENQUIRIES NAME:

ENQUIRIES TEL: (012) 441-5702

DATE: 2016-03-10

Dear Student

I wish to inform you that your registration has been accepted for the academic year indicated below. Kindly activate your Unisa mylife (<https://myunisa.ac.za/portal>) account for future communication purposes and access to research resources. Please check the information below and kindly inform the Master's and doctoral section on mandd@unisa.ac.za on any omissions or errors.

DEGREE: MED (SOCIO-EDUCATION) (98455)

TITLE: CURRICULUM RELATED BARRIERS AT FURTHER
EDUCATION AND TRAINING COLLEGES IN THE
EASTERN CAPE PROVINCE OF SOUTH AFRICA

SUPERVISOR: Dr MM MALALE

ACADEMIC YEAR: 2016

TYPE: DISSERTATION

SUBJECTS REGISTERED: DL50E95 DISSERTATION OF LIMITED SCOPE (M
ED - SOCIO-EDUCATION)

A statement of account will be sent to you shortly.

If you intend submitting your dissertation/thesis for examination, complete form DSAR20 (Notice of Intention to Submit) before 30 September. If this deadline is not met, you need to re-register and submit your intention for submission by 15 April and submit your dissertation by 15 June.

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Your supervisor's written consent for submission must accompany your notice of intention to submit.

Yours faithfully,

Prof G Zide
Registrar

APPENDIX C: LETTER TO CONDUCT RESEARCH AT THE COLLEGE

104 Stemele Street

Kwa-Magxaki

Port Elizabeth

6201

17 July 2014

The Chief Executive Officer

Eastcape Midlands College

Private bag X35

Uitenhage

6230

Dear Sir

Re: Request to conduct research at Eastcape Midlands College (Charles Goodyear Campus)

I am Nompumelelo Rina Lingela, a student researcher for M. Ed (Socio-Education). As a student I am required to conduct research to complete my dissertation in fulfilment of the requirements of my degree. My research title is: **Curriculum related barriers at Further Education and Training Colleges in the Eastern Cape.**

I would like to ask permission to conduct research at Eastcape Midlands College in the Eastern Cape Province. My research will involve interviewing lecturers and reviewing relevant documents. The interview will involve nine lecturers. It will be individual face-to-face and semi-structured interview which will take ten minutes per participant. There will be no financial implications and no risks anticipated.

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The interviews will be tape recorded. All information that will be shared will be kept confidential. The identity of participants will remain anonymous. Any personal details will be kept confidential. Participants are free to withdraw from the study at any time during the research.

The results of this study will contribute towards the improvement of teaching and learning at the institution.

Upon completion, a copy of the dissertation will be made available to the college. For more information or clarity you can contact me at 0731731200/linonge@webmail.co.za or my supervisor Dr Matome Malale at 012 429 2914/malalmm@unisa.ac.za.

I thank you in advance and look forward to your positive response.

Yours faithfully

Lingela N.R.

APPENDIX D: LETTER OF CONSENT TO LECTURERS

104 Stemele Street

Kwa-Magxaki

Port Elizabeth

6201

17 July 2014

Esatcape Midlands College

Private bag X35

Uitenshage

6230

Dear Sir/Madam

Re: Request to participate in an interview

I am Nompumelelo Rina Lingela, a student researcher for M. Ed (Socio-Education). As a student I am required to conduct research to complete my dissertation in fulfilment of the requirements of my degree. My research title is: **Curriculum related barriers at Further Education and Training Colleges in the Eastern Cape.**

I would like to invite you to participate in my research. My research will involve interviewing lecturers and reviewing relevant documents. The interview will involve nine lecturers. It will be individual face-to-face and semi-structured interview which will take ten minutes per participant. There will be no financial implications and no risks anticipated.

The interviews will be tape recorded. You are ensured that the necessary protocol regarding ethical considerations will be followed. All information that will be shared will be kept confidential. Your identity of participants will remain anonymous.

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Any personal details will be kept confidential. You are free to withdraw from the study at any time during the research.

The results of this study will contribute towards the improvement of teaching and learning at the institution.

Upon completion of my dissertation, a copy will be made available to the college. For more information or clarity you can contact me at [0731731200](tel:0731731200)/linonge@webmail.co.za or my supervisor Dr Matome Malale at 012 429 2914/malalmm@unisa.ac.za.

I thank you in advance and look forward to your positive response.

Yours faithfully

Lingela N.R.

APPENDIX E: CONSENT FORM

I _____ (you full name) have read the letter and understand the contents about the study. I therefore voluntarily give my consent to participate in the interviews.

Signature of participant:

Date:

Signature of researcher:

Date:

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APPENDIX F: INTERVIEW SCHEDULE

SECTION A: PESROANL CHARACTERISTICS

Biographical:

1. Age group:

20-30

30-40

40-50

50-above

2. Gender:

Male

Female

3. Qualification obtained:

Can you choose in the following which one describes you?

N1-N6: _____

National N-Diploma: _____

National N-Diploma plus Trade test: _____

National N-Diploma plus Trade test plus Qualification:

Teachers' qualification: _____

Any other qualification, please add? _____

4. Write down in the box number of years teaching in the FET College and school.
5. Which subjects are you teaching?
6. What levels are you currently teaching?
7. What training have you been exposed to by your college?

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SECTION B: CURRICULUM RELATED BARRIERS

Semi-structured interview schedule

8. What are curriculum related barriers in teaching and learning?
 - 8.1 Can you explain in your own words what do you understand about barriers in teaching and learning?
 - 8.2 What major barriers do you experience in the activities of teaching and learning?
 - 8.3 In your own understanding how would you describe curriculum?
 - 8.4 How do you experience the curriculum of the FET Colleges?
 - 8.5 What are the challenges that you face in carrying out this curriculum?
 - 8.6 How do learners respond to FET College curriculum?
 - 8.7 Which factors of curriculum do you think create barriers in teaching and learning?
 - 8.8 What assessment tools does your college use to assess knowledge of learners?
9. How can curriculum delivery be a barrier?
 - 9.1 How do you involve your learners when planning for lessons?
 - 9.2 How do you see that the learners follow when you deliver the lesson?

9.3 In which ways do you give feedback to learners about their progress?

9.4 Under which circumstances do you use a certain type of resources when delivering a lesson successfully?

10. What are strategies required to improve curriculum delivery?

10.1 What teaching and learning strategies do you think would be necessary to improve curriculum delivery?

10.2 What skills do you think that lecturers need to learn in order to improve curriculum delivery?

Thank you for your participation



**Eastcape
Midlands
College**

104 Stondale Street
Kwa-Magxaki
Port Elizabeth
6201

30 July 2014

Attention: Ms Lingola

Dear Madam,

REQUEST TO CONDUCT RESEARCH

Approval is hereby granted regarding your request to conduct research at Eastcape Midlands College.

You are requested to kindly keep your campus manager informed at all times so as not to disrupt teaching and learning.

We wish you all the best with your endeavors.

Regards



**JJ MBANA
PRINCIPAL**

Creating New Futures

HEAD OFFICE
Private Bag 735
UPenthoop, 6230
Tel: 041 995 2000
Fax: 041 995 2008
E-mail: emc@emcat.co.za
www.emca.co.za



**higher education
& training**

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

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Ms Nompumelelo Rina Lingela
104 Stemele Street
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PORT ELIZABETH
6201

By email: linonge@webmail.co.za

Dear Ms Lingela

**REQUEST TO UNDERTAKE RESEARCH IN THE EASTCAPE MIDLANDS COLLEGE IN THE
UITENHAGE DISTRICT: CURRICULUM RELATED BARRIERS AT FURTHER EDUCATION
AND TRAINING COLLEGES IN THE EASTERN CAPE OF SOUTH AFRICA**

I acknowledge receipt of your request for permission to conduct research in the Eastcape Midlands College in the Uitenhage District on the topic "Curriculum related barriers at Further Education and Training Colleges in the Eastern Cape of South Africa".

Your request has been evaluated by the Department and it is my pleasure to inform you that your request for permission to undertake the above research has been granted. You are advised to obtain further permission from Principal of the Eastcape Midlands College before commencing any research activities.

You are further requested to attach the Ethics Clearance Certificate from the University of South Africa to correspondence addressed to the College when communicating with the Principal.

The topic of your research is of great interest to the Department. It will therefore be appreciated if you could share the findings of your research with the Department upon completion of your research.

I wish you all of the best in your research study.

Yours sincerely

Mr G F Qonde
Director-General

Date: 29/10/2014

Higher Education and Training • Haisi Dondonyo un Dondonyo • Indawo Laphakama Nkucasona • Iindaba Ephaqamelo Nabantu
Ibhawo Ephaqamelo Nkucasona • Ibhawo ePhakanyiso noLigqeno • Ibhawo ya le Ntsho na Ntsho • Ibhawo ya Ntsho na Ntsho
Thulo va Godimo le Thulo • Thulo e Thulo • Thulo e Nkomo le Kato

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